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ABSTRACT

This report describes a 1-year effort at San Francisco State College to incorporate as part of a Cycle 5 Teacher Corps Project some aspects of competency-based education in the instruction of the Teacher Corps interns. A 3-hour weekly course in curriculum and instruction occurring for the entire 1970-71 academic year served as the vehicle of competency-based instruction. Intern and staff dissatisfaction with the initially traditional nature of the course resulted in a number of innovative changes, the most noticeable of which being the formation of cluster-development teams, consisting of both interns and staff members. These teams worked jointly to design instructional modules and clusters (groups of modules), and to collect, store, and organize the material necessary for the implementation of these modules. Intern attitudes toward the Teacher Corps program were assessed both at the beginning and end of the 1970-71 academic year. A number of recommendations for developing competency-based instructional programs are given. An 18-item bibliography and appendixes are included. (Related document SP 005 815.) (Author)

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EVALUATION OF NATIONAL CENTER FOR EDUCATIONAL RESEARCH AND DEVELOPMENT/TEACHER CORPS COMPETENCY-BASED EDUCATION DEVELOPMENT PROJECT

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U. S. DEPARTMENT OF
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ABSTRACT

This report describes a one-year effort at San Francisco State College, as part of a Cycle 5 Teacher Corps Project, to initiate some aspects of competency-based education into the course work and instruction of the teacher-training interns involved in the program. A three-hours-per-week course in curriculum and instruction occurring for the entire 1970-1971 academic year served as the focus of competency-based instruction. Intern and staff dissatisfaction with the initially traditional nature of the course resulted in a number of innovative changes, the most noticeable of which being the formation of cluster-development teans, consisting of both interns-in-training and staff members. These teams worked jointly to design instructional modules and clusters (groups of modules), and to collect, store, and organize the material necessary for the implementation of these modules. Intern attitudes and comments toward the competency-based, as well as other aspects, of the Teacher Corps program, were assessed both at the beginning and end of the 1970-1971 academic year. A number of recommendations for developing competency-based instructional programs are suggested.

I. INTRODUCTION

This report describes the results of a one-year effort at San Francisco State College to implement certain changes in a traditional instructional program in order to make it competency-based in nature. Since this process of change was viewed as requiring considerable time, training, and inclination, it was decided to make the initial efforts in this regard within the context of the San Francisco State College - San Francisco Unified School District Cycle 5 Teacher Corps project during the 1970-1971 academic year. A number of project objectives, as listed below, were identified as being feasible and desirable during the Summer, Fall, and Spring semesters of the 1971-1972 academic year. Due to a number of difficulties faced by the San Francisco State College Teacher Corps program, however, implementation of these objectives became more difficult than otherwise might have been the case. These problems, along with the methods and procedures employed to attempt implementation and assessment of intern attitudes toward this effort, are discussed more fully in the body of this report.

II. PROJECT OBJECTIVES

The initial proposal for the competency-based, teacher-training project described in this report listed six purposes and procedures (objectives) that were intended to guide the project's development and operation. These objectives were as follows:

1. To clarify and elaborate the established objectives of the San Francisco State College - San Francisco Unified School District Cycle 5 (1970-72) Teacher Corps proposal and amendments with emphasis on behavioral statements
2. To collaborate with NCERD/TC National Coordinator in the planning of evaluation design, instrument selection, pre- and post-testing, and other data collection and analysis related to established objectives
3. To review, select, implement and evaluate the effectiveness of available competency-based teacher-education program components supportive of established objectives, with priority to components developed in the NCERD Model Teacher Education Project
4. To develop, implement, and evaluate the effectiveness of new competency-based program components supportive of Cycle 5 objectives with the participation of project staff, team leaders, and interns
5. To develop and utilize program and intern feedback and evaluation systems
6. To collaborate in competency-based teacher education program development efforts with the Elementary Education Department, School of Education and other departments and projects and with those of non-SFSC organizations such as Northwest Regional Educational Laboratory, Far West Laboratory for Educational Research and Development, and Stanford Center for Research and Development in Teaching.

III. PROCEDURES

A four-stage development cycle was planned for development and implementation of these objectives. The dates and details of these stages are described below:

A. Stage I: Planning for Development and Implementation (June 15-July 10, 1972)

Five activities were planned to be accomplished during this period. These activities were as follows:

1. Clarification and elaboration of preservice and inservice objectives in our Teacher Corps Cycle 5 proposal and amendments with emphasis on behavioral statements.

2. Review and selection of available materials for competency-based teacher education program components compatible with objectives. (Emphasis will be given to the "inquiry groups" and "feedback team" organization of the Teacher College, Columbia University elementary teacher education model and the substantive content of the ComField model of the Northwest Regional Education Laboratory. However, the overall approach will be electric with regard to the materials of all available models of teacher education.)

3. Development of new program components.

4. Conference with NCERD/Teacher Corps National Coordinator and projects personnel in Kansas City, Missouri on tentative plans for data collection and evaluation.

5. Planning meetings with Northwest Regional Education Laboratory representative or consultant for implementation and evaluation of competency-based program components compatible with Cycle 5 objectives. (Preliminary contacts have been made.)

A brief discussion of each of the above now follows:

1. Cycle 5 preservice and inservice objectives were considered carefully and reconceptualized, where necessary, in order to restate them in competency-based terms. These objectives, as rewritten, are listed under points 2, 3 and 4 below.

2. A variety of available materials describing competency-based teacher education program components were reviewed in terms of their suitability and feasibility for application to the San Francisco

State College program. These included not only several books on behavioral objectives, but also several books on behavioral objectives, but also several of the Model Elementary Teacher Education Project Phase I Final Reports. A bibliography of the materials consulted may be found in Appendix I. Though many ideas were obtained, no materials were located that could be applied in toto to the particulars of the San Francisco State College program.

3. Several discussions were held with the Cycle 5 staff then on hand (primarily the Director and Assistant Director) as to which aspects of the forthcoming Cycle 5 Teacher Corps program might lend themselves most easily to a competency-based approach. It was decided that the following should be attempted:

°An orientation of team-leaders and staff to the rationale behind and rudiments of competency-based education. This was planned as part of a staff training period during the week of July 13-July 24, 1970.

°An initial effort to engage interns in two microteaching sessions in order to familiarize them with a competency-based approach to instruction. This was planned to take place during the week of July 27-September 4, 1970.

°The provision for a competency-based six-unit seminar in teaching practices and procedures, continuous through the fall and spring semesters of the 1970-1971 academic year to be taught by the NCERD program specialist and other Cycle 5 staff members. This seminar would constitute the Cycle 5 program's experimental component.

°The establishment of clearly-defined, behavioral objectives for each of the courses that the interns would take during the fall and spring semesters of the 1970-1971 academic year.

The success of each of these will be discussed more fully in later pages of this report.

4. The Director of the Cycle 5 Teacher Corps Program at San Francisco State College and the NCERD program specialist attended a two-day meeting of program specialists and Cycle 5 directors, along with the NCERD/Teacher Corps National Coordinator and other personnel from the United States Office of Education during the month of June, 1970 to firm up plans for data collection and evaluation of the competency-based aspects of the Cycle 5 program. The instruments decided upon, and the results obtained are described in detail in the overall final report by the National NCERD Coordinator and available from the National Center for Educational Research and Development in Washington D. C.*

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*See Wilford A. Weber. Final Report. Project No. 0-0744, Grant No. OEG-0-70-4535. The Competency-Based Teacher Education Development Projects, two volumes, Washington, D. C.: U.S. Dept. of Health, Education, and Welfare, Office of Education, National Center for Educational Research and Development, December, 1971.

5. Time pressures prevented the meetings originally planned for with Northwest Regional Education Laboratory representatives from taking place. The NWREL was not drawn on for consultant help during the 1970-1971 year do to budgetary restrictions and the fact that the NCERD program specialist and other staff personnel possessed similar qualifications.

B. Stage II: Cycle 5 Team Leader Training and Staff Planning Period (July 13-July 24, 1970)

Three activities were planned to be accomplished during this period. These activities were as follows:

1. Orientation of team leaders and staff to competency-based teacher education emphasis.

2. Cooperative review, selection, and development of competency-based materials in line with program objectives, especially those for preservice.

3. Planning for microteaching experiences.

A brief discussion of each of these now follows:

1. The NCERD program specialist met continuously for a week to discuss the rationale behind and rudiments of competency-based instruction. Several examples of behaviorally-written objectives in various subject areas in both cognitive and effective domains were presented and discussed, and participants tried their hand at writing such objectives themselves. The link between objectives, viewed as intent, and learning activities, viewed as evidence of the degree to which the objectives have or are being attained, was presented and discussed.

2. Many of the materials listed in Appendix A were perused and discussed by the staff. An initial list of possible competencies (objectives) that the program might emphasize was begun. These objectives are listed in Stage III (C) later in this report.

3. Plans for each intern to teach-reteach a five minute lesson on a topic of their choosing, with a ten minute critique in between by a staff member, were firmed up, and a nearby facility obtained where this could take place.

4. The leadership role of a team leader was viewed as being unique and complex in its many dimensions of school and community responsibilities. Indeed, the team leader often, in the past, proved to be the key person in the success or failure of an individual Teacher Corps intern. As the project representative to the school site, the team leader would be the direct communication link between Teacher Corps staff and the principal and school faculty.

During the course of the 1970-1971 academic year the instructional staff depended on the team leader to plan with them the kind of field experience which would complement for the intern the more theoretical and developmental content of the academic on-campus Teacher Corps seminars. These same field experiences also frequently acted in reverse to provide the inductive base for seminar discussions. In addition, the team leaders offered interns and staff a variety of recent personal classroom experience with low-income children and experience as an elementary school staff member. The team leader, although not a member of the college faculty, was a full partner in instruction and in guiding the professional growth of interns. Consequently, orientation of the team leader to the program in general and the competency-based aspects in particular was viewed as a very important aspect of the program's eventual success.

Accordingly, a two-week team leader orientation workshop was held during the period July 13-July 24, 1970. The principals of the elementary schools involved in the program attended as their time allowed. The overall objective for this two-weeks was to help the team leader enter a new phase in his development from being a leader of children to that of a leader of young adults. This transition has often been difficult for many specialists in education, since the team leader must be prepared to work with energetic, often impatient, often militant, action-oriented young people. It was felt that this could be done, however, and with a minimum of anxiety if the team leader:

a) fully understood his role and was assigned specific tasks to perform;

b) trusted the instructional and administrative staff to support him in his role with interns and school faculties and administrators;

c) could explain the Teacher Corps program to school faculty, parent and community groups and could cite actual Teacher Corps accomplishments locally and nationally;

d) understood the program's basic goals and terminology related to instructional objectives;

e) felt comfortable in working in a multi-racial and ethnic setting; and

f) was familiar with the school community and had seen a community education program in action.

The following, more specific, objectives were therefore decided upon as a means by which the above goals might hopefully (at least to some extent) be accomplished. At the end of the two weeks orientation session, it was intended that all team leaders would be able to do (or have done) the following:

1) learn the goals of the program and the roles of staff, team leader, and interns, and what is expected of each as related to these goals, as evidenced by their ability (Competency) to: explain (orally or in writing) these goals and roles to an individual not previously aware of the program to the extent that this individual indicates he is clear about the nature of the program's goals and the various roles of staff members, team leaders and interns;

2) refresh their knowledge of the San Francisco Unified School District policies related to such factors as attendance, hours, discipline, and personnel philosophy, as evidenced by their ability (Competency) to: identify these sources to which they can turn or suggest others turn to for information concerning such policies;

3) review the characteristics commonly attributed to children of low-income families, the reasons which lie behind the development of such characteristics, and what such characteristics imply for the instruction of such children (and the establishment of guidelines for those who will instruct those who will teach children) as evidenced by their ability (Competency) to: describe several (six or more) characteristics commonly attributed to children of low-income families, along with the reasons underlying the development of such characteristics, and suggest (orally or in writing) several (five or more) implications of such characteristics for the development of guidelines to aid those who will instruct such children;

4) consider the views of a variety of community representatives, as evidenced by their ability (Competency) to: describe some (two or more) of the views held by said representatives so that the representatives would agree that the description is sufficiently adequate to be considered an accurate statement of their views;

5) participate in one or more field investigations of the five project school communities that are a part of the Teacher Corps program, as evidenced by their ability (Competency) to: state several (three or more) ways in which these school communities are similar and different in terms of overall characteristics and suggest some (three or more) possible implications of these similarities and differences for their future working with Teacher Corps interns;

6) learn a number of Teacher Corps definitions and examples to inservice instructional terminology such as competency-based education, team teaching, differentiated staffing, individualization of instruction, teaching strategies, as

evidenced by their ability (Competency) to: state accurately a definition of these terms and give two or more correct examples of each as evidenced by the fact that other team leaders and staff members agree that they are indeed examples;

7) explore and discuss the cultural differences and similarities which exist among the characteristics of the four groups of interns -- Black, Chinese, Latino and White -- with whom they would be working during the Cycle 5 Teacher Corps project, as evidenced by their ability (Competency) to: describe several (four or more) ways in which the intern groups are similar and different, and state several (four or more) implications of such similarities and differences for their own work as a team leader during the forthcoming year.

The format of this two-week orientation seminar revolved around a series of lectures and audio-visual presentations during the morning followed by discussions and "rap sessions" in the afternoon. One afternoon during the second week was occupied by an on-site visit and exploration by all team leaders visit to one of the five elementary schools in which interns were to be eventually placed. The Team Leaders also explored, on their own, the communities in which these schools were located. The last day of the two-week period was occupied by having the team leaders engage in an open-ended discussion with a staff member and another team leader in which they were asked to demonstrate orally their competency as identified in the objectives listed above. It was the concensus of the Teacher Corps staff, along with the Assistant Director, that each team leader had fulfilled completely each of these objectives.

C. Stage III: Cycle 5 Preservice Training of Team Leaders and Interns (July 27-September 4)

Eight activities were planned to be accomplished during the period. These activities were as follows:

1. Pre-evaluation of interns in collaboration with National Coordinator.

2. Training of team leaders in supervision.

3. Implementaiton of some competency-based program components selected prior to preservice.

4. Cooperative selection and development of competency-based components in line with program objectives for preservice and inservice periods.

5. Use of microteaching in implementation of some program components.

6. Collaboration with School of Education TTT program development efforts in common objectives.

7. Collaboration with Northwest Regional Education Laboratory.

8. Clarification and elaboration of objectives for inservice period in Cycle 5 proposal and amendments.

9. Institution of interns in goals of Teacher Corps and nature of the future teaching experience.

A discussion of each now follows:

1. The perceptions of all interns in the Cycle 5 program, were examined in a number of ways. Data were obtained concerning intern's perceptions of traditional evaluation, the competency-based aspects, teacher education programs, the Cycle 5 program, teaching in general and low-income minority individuals. This data was collected at three different times:

a) at or very near the beginning of their preservice program;

b) just after or near the end of preservice training; and

c) near the end of the first year of inservice training.

Intern Ratings Regarding Competency-Based Teacher Education

A nine-point rating scale was used and interns were asked to rate:

a) traditional teacher-education programs;

b) competency-based teacher education programs;

c) the competency-based aspects of the San Francisco State College program;

d) the San Francisco State College program in general; and

e) their knowledge about competency-based teacher education.

Prior to the administration of the questionnaires during the first testing session, a brief slide-tape presentation--thirty slides and a twenty-minute audio-tape--comparing traditional and competency-based teacher education programs was presented. These materials were not in the other two testings. The directions and the rating scales from the questionnaire used in the first testing are presented below:

"Using the rating scales on the following page, please indicate your feelings about competency-based teacher education as described in the materials you have seen and heard as compared to traditional programs as you perceive them by circling that number on each scale which best describes those feelings."

Traditional Program	1	2	3	4	5	6	7	8	9
	Very Negative								Very Positive
Competency-Based Program	1	2	3	4	5	6	7	8	9
	Very Negative								Very Positive

The directions and the rating scales used in the second and third testings are presented below:

"Using the rating scales below, please indicate your feelings about:

1) traditional teacher education programs as you presently perceive them;

2) competency-based teacher education as it would be in a program which is fully developed and operating;

3) the competency-based teacher education aspects of your program which you have experienced; and

4) the total educational experience you have had thus far in your program.

Traditional Program	1	2	3	4	5	6	7	8	9
	Very Negative								Very Positive
Ideal Competency-Based Program	1	2	3	4	5	6	7	8	9
	Very Negative								Very Positive
Competency-Based Aspects of Your Program	1	2	3	4	5	6	7	8	9
	Very Negative								Very Positive
Your Total Program	1	2	3	4	5	6	7	8	9
	Very Negative								Very Positive

"Please rate yourself regarding the level of knowledge about the notions of competency-based teacher education that you feel you have."

Your Knowledge Level	1	2	3	4	5	6	7	8	9
	Very Negative								Very Extensive

The results obtained from the use of these rating scales are presented later in Table I in the Results section of this report.

Intern Attitudes Toward Teaching

As a part of the test battery administered to interns they were asked to respond to the Teaching Situation Reaction Test. The TSRT was developed by J. K. Duncan and J. B. Hough at The Ohio State University in 1966; the form used here was a modification developed and widely used in the Cooperative Urban Teacher Education Program of the Mid-Continent Regional Educational Laboratory. Studies reported by the authors and others suggest that the TRST is valuable in predicting teacher performance; these include subject matter competence, teacher-pupil relationships, classroom management, and human relation skills.

The TSRT is a forty-four item, paper and pencil test which poses a general teaching situation. Each of the items poses a problem situation to which the student is asked to rank the four optional courses of action which are presented. These problem situations include planning, handling restless students, dealing with pupil-pupil conflicts, working with shy students, and so forth. The following items illustrate the testing format:

After meeting your class four times, you notice several things: Two boys seem particularly dirty; one girl seems to be withdrawn--the students do not pay any attention to her, although she is a pleasant looking, well-dressed girl; there are four or five youngsters, apparently very good friends (both boys and girls), who do most of the talking and take most of the initiative; and students seem to continually interrupt each other and you.

°In the interests of the two boys who are especially dirty you would:

(a) find an opportunity to discuss the matter of cleanliness with the class.

(b) speak to the boys about their need to be clean in a conference with them.

(c) inaugurate a cleanliness competition with a prize to that half of the class with the best record, putting one boy in each half.

(d) speak to the boys about their need to be clean and arrange facilities at school where they could clean up.

°In the interests of the apparently withdrawn girl, you would:

(a) talk to her informally over a period of time to see if you could determine her difficulty.

(b) call on her regularly for contributions to the discussion.

(c) discover a skill she has and have her demonstrate for the class.

(d) have a conference with her and tell her to become involved with the class discussion and speak up.

°To improve the relationship of your class to the apparently withdrawn girl, you would:

(a) determine who, if anyone, is friendly with her and arrange to have them work together on occasion.

(b) take the girl aside and help her see how she can establish better relations with her classmates.

(c) arrange to have her work with the group of boys and girls who take most of the initiative.

(d) allow her to work out her own problem.

°With regard to the four or five youngsters who do most of the talking and take the initiative, you would tend to believe:

(a) they are brighter than most of the other students.

(b) they are the leaders of the class.

(c) there is considerable variation in student's ability to participate in class.

(d) they are a little too cocky and think they know more than the others.

°With regard to the tendency of class members to interrupt while others are talking, you would:

(a) tell your class politely but firmly that interruptions are impolite and should not continue.

(b) discuss the matter with your class, determining why this happens and what should be done about it.

(c) organize a system of hand raising and set rules for students participation in discussion.

(d) set rules for student participation in discussion and firmly but fairly reprimand each person who breaks the rules.

The results obtained from the used of this Teaching Situation Reaction Test are presented later in Table 2 in the Results section of this report.

Intern Attitudes Toward Low-Income, Minority Persons

The final part of the test battery administered to interns was the Cultural Attitude Inventory. The CAI as used here was a greatly modified version of a Likert-type attitude scale developed by Dorothy J. Skeel at Pennsylvania State University in 1965 and used by the Cooperative Urban Teacher Education Program of the Mid-Continent Regional Educational Laboratory. To the fifty items of

Skeel's scale were added eighty-three similar items developed at San Francisco State College. A 133-item form of the scale was administered during the first testing; through item analysis procedures the scale was reduced to forty items. It was this forty-item form of the scale which was used in subsequent testings; data reported here are from that form.

Interns were asked to "strongly agree," "agree," "undecided," "disagree," or "strongly disagree" with each of forty statements. The scoring procedure was to assign a score of 5 for a "correct response" to an item (strongly agree or strongly disagree depending upon how the item was keyed); a score of 4 was given for the next nearly correct response and so on. Therefore, the range of possible total scores was 40 (a score of 1 on each of the forty items) to 200 (a score of 5 on each) with a higher score indicating a more positive attitude toward low-income minority persons. Several sample items are presented below:

6. Parents of children from low income and/or minority families are not interested in education.
8. The values of low income and/or minority children are to be ignored and middle class values imposed upon them.
16. Low income and/or minority background places a ceiling on a child's achievement potential.

The results obtained from the administration of the Cultural Attitude Inventory are shown in Table 3 in the Results section of this report.

Intern Comments

Interns were also asked to comment in writing, essay style, about the competency-based aspects of the San Francisco Cycle 5 program. Three sets of comments were obtained:

1. Excerpts of comments obtained from interns just prior to or during the very beginning of preservice training. Comments were made in response to the following directions: "Using the space below and the back of this sheet, if necessary, please describe your perceptions of the new trends in teacher education and competency-based teacher education. Please be just as frank as possible regarding your feelings."

2. Excerpts of comments obtained from interns after preservice training but prior to inservice training. Comments were made in response to the following directions: "Using the space below and the back of this sheet, if necessary, please describe your feelings about the experiences you have had thus far in Teacher Corps. Please pay particular attention to: (1) your feelings about the competency-based aspects of the program you have experienced, and (2) your feelings about the program as a whole in light of your expectations prior to becoming an intern."

3. Excerpts of comments obtained from interns very near the end of the first year of inservice training. Comments were made in response to the following directions: "Using the space below and the back of this sheet, if necessary, please describe your feelings about the experiences you have had thus far in Teacher Corps. Please pay particular attention to: (1) your feelings about the competency-based aspects of the program you have experienced, (2) your feelings about the program as a whole in light of your expectations prior to becoming an intern, and (3) particular problem areas you feel to be important."

Excerpts of comments from interns at these three times are presented in the Results section of this report.

2. To help team leaders achieve a practical competence in working with interns and in supervising their initial efforts in tutoring and small group teaching an on-going seminar in principles and practice of supervision was planned. A number of fundamental principles of supervision as well as several specific and unique instructional and supervisory skills were developed, mastered, and used. Varying means of helping interns plan lessons of assessing and correcting classroom weaknesses were explored. Methods of gaining support and cooperation of resident teachers were discussed as were techniques for working with principals, auxiliary staff, and paraprofessionals. Understandings and skills fundamental to success in team leadership were stressed. Readings to reinforce practical experience and group discussion were suggested. The seminar was designed to serve as a model of team leadership.

Accordingly, a number of competencies expected of team leaders upon completion of this seminar were identified. These were as follows:

It was hoped that each team leader would:

a) possess a variety (ten or more) specific supervisory and instructional skills that he or she could use in working with interns during the remainder of the program;

b) be aware of a number of classroom weaknesses that beginning teachers typically display and possess a variety of specific remedies to suggest for dealing with such weaknesses;

c) possess a variety of techniques and skills for working with resident teachers, principals, auxiliary staff, and paraprofessionals;

d) be capable of coordinating the work of interns so that they would plan and operate as a team or unit in their teaching endeavors; and

e) be aware of a variety of materials that are available for use with children of low-income families (and how these could be obtained).

Team leaders were also enrolled in a workshop in human relations. This workshop was designed to help team leaders to better understand themselves and their effect on others in a working relationship. Since much of their work was done through personal contact with students and with each other, it was felt that their effectiveness should be enhanced by increased social sensitivity, the ability accurately to sense what others think and feel. Such understanding was expected to increase their behavioral flexibility. The workshop content included communications theory, perception, sematics, diffusion research, models of change, status difference and leadership roles. Listening exercises, communication experiments, leadership practice, role-playing, films, discussions, lectures and readings were used. Accordingly, the following competencies were expected of team leaders upon completion of this workshop:

It was hoped that each team leader would be able to:

a) use effectively interpersonal or group process skills to help interns apply various instructional and non-instructional competencies they learned in their Teacher Corps seminars;

b) help interns integrate the skills and techniques they learned in their Teacher Corps seminars into a unique and personally relevant teaching style;

c) be increasingly sensitive to and aware of the differences which exist among the interns with whom they were to work, and be able to deal with these differences in a manner appropriate to each individual intern;

d) be able to plan unique developmental experiences for each intern in the schools in which they would teach; and

e) be more effective teachers themselves, as evidenced by the fact that they would be able to demonstrate a wide variety of instructional and non-instructional skills and competencies in the classrooms of the schools within which their interns teach.

Comments as to the effectiveness of these supervisonal and human relations seminars can be found later in the Results section of this report

3, 4. Due to the fact that every moment of the team leader's time was occupied by attendence at lectures; discussions and staff planning sessions concerning the start of the school year, selection, development and implementation of competency-based materials was put off until the next stage of the development cycle. Efforts in this regard are described in Part D.

5. All interns participated in a microteaching experience. Each intern taught and then retaught a five minute lesson on a subject of their choosing with a ten-minute staff critique in between.

Lack of funds, facilities and equipment prevented any further experiences of this type. This was deemed unfortunate since the unanimous opinion of both interns and staff was that microteaching offered a useful means whereby instructional skills and techniques could be improved. Since the program was able only to provide a single microteaching experience no further or more systematic assessment was attempted.

6. Discussions were initiated with the Director and staff members of the TTT project at the College concerning the possibilities of collaboration on objectives of mutual interest. Since the TTT trainees were inservice rather than preservice teachers, however, such collaboration was not deemed feasible and efforts in this regard were not pursued further.

7. Collaboration with the Northwest Regional Educational Laboratory was not pursued, due to the belief that the Cycle 5 staff, including the NCERD Program Specialist, had sufficient skill and ability in the areas (notably the writing of behavioral objectives, curriculum design and development) in which the NWREL could provide assistance.

8. Objectives to be developed during the inservice portion of the Cycle 5 program were identified and discussed. Many of these were originally intended for the preservice cycle, but the staff soon realized this to be too ambitious and hence they were moved over to the inservice phase. These objectives are described and discussed in Part D of this report.

9. The overall objectives for the training of interns during the preservice phase were as follows:

a) To foster intern commitment to the Teacher Corps project objectives presented on pages 1-5 of the Cycle 5 proposal, as evidenced by:

--ability to explain the background and relevance of the objectives in relation to both local and national needs for educational change

--planning with team and staff members for implementation of objectives in "own" school-community setting

b) To foster intern commitment to work within the organizational format and for the two-year training period required in a Teacher Corps project, as evidenced by:

--regular and punctual attendance at Teacher Corps program activities

--ability and willingness to interact constructively with fellow interns, team leaders and staff

--ability and willingness to assume team member identification, role and responsibility

--ability and willingness to solve problems individually, and within small and large group settings

--ability and willingness to work in team-teaching arrangement

--ability and willingness to assume responsibility in community-based education activity within a team format

c) To promote an understanding and appreciation in interns of the varied community settings and life styles of low-income families in each of the project school areas, as evidenced by intern:

--ability to explain (orally or in writing) several (six or more) of the major social and educational problems of low-income families in each school area

--participation in out-of-school activities within the community

--ability to identify the major pressure groups in each school area, and describe how these groups affect the schools

--ability to analyze several (five or more) problems of urban development related to each school and community

--identification of and knowledge about community agencies or groups providing services such as health, social services, job placement and education

--ability to apply at a rudimentary level techniques for community analysis

--knowledge about family structure and kinship patterns including comparative analysis of groups of differing sub-cultures, and ability to explain what such structure and patterns imply for teaching children who come from such a structure or possess such a pattern

--ability to analyze programs of community boards, committees and other formal and informal groups involved in decision-making that may affect education, and then utilize such analysis to modify one's instructional efforts when and where appropriate

d) To begin to explore and break down sterotypic attitudes toward life styles of low-income families including the issue of racial and ethnic minority membership of project school families and of the Teacher Corps interns, team leaders and staff, as evidenced by:

--displaying positive attitudes toward the achievement potential of children from low-income families

--displaying sensitivity to the needs of all children, through exemplifying an awareness of, and respect for, the similarities and differences of ethnic groups

e) To explore and provisionally determine the ideologies, goals and values (actual and professed) held by various groups in American society as they relate to accomplishing objectives #c and #d.

f) To demonstrate an understanding of the disparity between the life styles of the various groups of project-school low-income families with those of some of the interns, team leaders and staff, as evidenced by a willingness to listen to and encourage the viewpoints of all the above when operating as a teaching team.

g) To explore and provisionally determine persistent or recurrent problems or failures of American society as related to objectives #c, #d and #f.

h) To explore and provisionally determine the principal agents, agencies, and avenues for change in American society as they relate to objectives #c, #d and #f.

i) To identify or develop a variety of relevant learning experiences for children in the project schools in which the interns will teach.

j) To familiarize interns with the San Francisco Unified School District's policies relative to attendance, hours, discipline, personnel philosophy and three R's (rules, regulations and requirements), and the new "Equality-Quality" master plan.

k) To foster "professional attitudes" and provide specific competencies in a classroom, not only to gain the confidence of a cooperating teacher, but also to be seen by her as a "professional-in-training".

It was hoped that interns would upon completion of the preservice phase of the program be able to:

a) Understand the overall goals of Teacher Corps and be able to state these goals so that another individual, not a part of Teacher Corps, would be able to say that they are clear to him.

b) Understand the nature of their role as an intern so that they can state accurately what is expected of them by the staff, team leader, cooperating teacher and fellow interns.

c) Establish a set of (common) goals for children of low-income families.

d) Be aware of the similarities as well as the differences that exist among a variety of ethnic groups in order to increase their understanding of the characteristics of children of low-income families.

e) Participate in an initial field experience with children of low-income families.

f) Understand the settings and life-styles of the families and students with whom they will be dealing, and the influences of these settings and life-styles on children as they interact with the school environment.

g) Learn several (ten or more) specific skills that will increase their effectiveness in dealing with children of low-income families.

h) Successfully participate in the teaching "act" by:

--successfully participating in team planning and teaching

--successfully introducing and bringing to fruition two five-minute microteaching lessons

i) Discuss the nature of the schools and students with whom they will work with communicy representatives and consultants.

j) Become aware of how changes in the present system can be brought about through a "positive commitment" to constructive change.

All interns were enrolled in a one and one-half hour course meeting daily during which they had the opportunity to listen to lectures, all demonstrations, and discuss information pertaining to each of the above goals. They also met daily for one to two hours with their team leaders and other staff members in which the information presented in the course was discussed and the competencies mentioned above explored. As mentioned earlier, due to a lack of funds, time and facilities, only one microteaching experience was possible. The unanimous, though informal, assessment of three instructional staff members, the Assistant Director for Cycle 5 (who sat in on all instructional sessions during this phase 1 and the team leaders was that all the above objectives were completely attained.

D. Stage IV: Cycle 5, Inservice Training (Academic Year 1970-1971)

Four activities were planned to be accomplished during this period. They were as listed below:

1. Cooperative adoption, development and implementation of competency-based program components supportive of selected inservice objectives.

2. Collaboration with the School of Education, Elementary Education Department, and other education department or project program development teams on objectives common to or related to Cycle 5 project.

3. Development of intern, feedback and evaluation systems.

4. "Post" evaluation in collaboration with National Coordinator.

A discussion of each follows:

1. The initial attempt to include a competency-based component in the Cycle 5 Teacher Corps program consisted of a three-unit course in Curriculum and Instruction, organized around clusters and modules. Clusters and modules were defined as follows:

- a) *Cluster*: Two or more modules, arranged in some sort of sequence.
- b) *Module*: A written outline of basic information, containing the following:
    - 1) A clearly stated OBJECTIVE or purpose. This objective should suggest one of three desired outcomes. (Listed in order of importance):
        - a) *Knowledge*: A specified amount of facts, concepts, generalizations, principles, laws, etc., importance for interns to *know*.
        - b) *Performance*: A certain skill, action, or task interns will be expected to do or perform under certain conditions (e.g., to a fellow intern; in a microteaching situation; in an actual classroom).
        - c) *Product*: Some *thing* (e.g., drawing, essay, completed number of arithmetic problems, model, list of words spelled correctly, etc.) or *process* (working with others on a group project, leading a discussion, helping another student complete a task, participating in a discussion, listening quietly to a record) that *pupils* will be expected to *engage* in or *produce*.

Such clusters and modules were initially prepared by the NCERD Program Specialist, and two examples of same are included in Appendix B to this report. The basic format of the course, however, remained traditional, centering around lecture and discussion. A growing sense of both staff and intern dissatisfaction with such a format resulted in the reorganization of staff and interns into cluster development teams. Staff and interns worked jointly to design clusters and modules, and to collect, store, and organize for use the information and materials necessary to complete the modules. The following suggestions were made in order to provide some help in standardizing the work of the cluster development teams

MEMO TO: Teacher Corps
Cycle 5 Staff
DATE: February 17, 1971

FROM: Jack R. Fraenkel
RE: Competency Based Education Terminology and Components

The following information may be of help in standardizing the work of cluster development terms:

1. It is important to realize and think about the fact that certain objectives will very likely have to be achieved before other objectives can be attained. For example, students must know that certain diagnostic tools exist and know how to use them before they can actually use them (perform) to diagnose a particular student in order to help him produce at a higher or more efficient level (products). Thus attention must be given to the order in which individual modules will be sequenced. The necessary PREREQUISITES for attaining each module must, therefore, be specified (if there are none, say so).

2. Interns should be given the opportunity to demonstrate a particular competency if they already possess it. (For example, if an individual can show he already knows the various kinds of diagnostic tools available by naming them and explaining their use, he should have the opportunity to demonstrate this prior to receiving instruction in this regard so that he may do something else with his time). Some PREASSESSMENT or opportunity to demonstrate that he knows, can perform, or can get his students to produce a certain product, should therefore be provided. This also provides interns with an indication of their strengths and weaknesses so they may engage in self-pacing.

3. If interns do not possess the desired competency (be it knowledge, performance on product) they must have a variety of options available by which they can acquire the competency. Not only the more traditional means (such as reading or attending class) but also more innovative alternatives (such as creating an original product on-site) should be considered. A variety of feasible LEARNING OPTIONS should accordingly be listed (one such option is intern suggestion -- i.e., the intern suggesting himself how he would like to demonstrate that he possesses the competency).

4. At some point, of course, each intern must demonstrate the extent to which he is competent in a particular area. Does he know the facts, concepts, etc. considered important? Can he perform as expected? Can his students produce the desired product (thing or process)? The DESIRED OUTCOME of the learning must be stated. This is the competency desired. In many cases *it will be identical with the objective (the objective may often be stated more generally, however). The desired outcome must be stated in behavioral terms. Such behaviors may be a specific behavior desired or examples of the kind of behavior desired. But the outcome should identify:*

a) A certain amount of knowledge learned (as evidenced by listing, stating, naming, explaining, etc.).

b) A certain performance (as evidenced by interns showing, demonstrating, asking, writing, illustrating modelling, etc.).

c) A certain product (as evidenced by pupils writing, drawing, making, multiplying, speaking, working in small groups, discussing, etc.).

5. The intern must know how well he is expected to do. How much knowledge must he know and how accurately? To what extent must he perform? What kind of products must students produce and of what quantity and quality? Who determines how well (or if) he has demonstrated his competency? Thus, a statement of the CRITERION or CRITERIA that indicates an acceptable level of knowledge, performance, or product must be listed, as well as who (team leader, resource person, supervising teacher, other teacher, principal, another intern, intern himself?).

6. Finally, provide, if possible. a resource Bibliography: A selective, annotated list of relevant materials (printed, audio-visual, and oral) by which the necessary information and/or skills necessary to attain the competency can be acquired.

Outline of Modular Development

Some thirteen clusters, each consisting of a number of modules, were developed. The first five were developed by the NCERD Program Specialist working independently of other staff, and served as models for future cluster module development. The last eight were developed by "Cluster Development Teams"--groups of five to eight interns, working under the direction of one or more staff members. The general format or procedure by which such cluster development teams worked involved the team members (both intern and staff) identifying the specific competencies to be mastered, identifying the materials and skills necessary for such mastery, gathering and organizing the necessary resource materials and having them available for student use, planning the order or sequence in which the modules to be mastered were to be organized, and then instructing their fellow interns as well as staff in the skills necessary to achieve the competencies. Samples of these modules are enclosed in Appendix B of this report.

2. Collaborat efforts with the Elementary Education Department of the School tion were beset with a host of problems almost from the start. he San Francisco State College program was faced

with host of difficulties that made the collaborative efforts and overall task of the NCERD Program Specialist more difficult than it might have been. The Cycle 5 Director resigned in mid-October effective at the start of the second semester, and no permanent Director was named for the remainder of the 1970-1971 school year. An Acting Director was named for the month of November, but was hesitant to exert direction due to a lack of clarity as to the authority he possessed. A five-man Board of Directors, including the NCERD Program Specialist, was appointed at the beginning of the Spring Semester to act until a permanent Director could be appointed. This tended to diffuse responsibility, however, making effective and quick decision-making difficult. The Chairman of the Elementary Education Department was then named Acting Director and Chairman of the Board (the Board was not disbanded until late April). Since almost all of the now Acting Director's time was spent in administering the large department of elementary education, and since he was only allocated 25% of his time for Teacher Corps activity, he was able to spend only a minimum of time on administrative (and other) matters of Teacher Corps, thus creating problems with regard to staff morale. since the NCERD Program Specialist was now also a member of the Board, he was obliged to spend time on administrative matters rather than program development. All administrative efforts were compounded to the effect that two Teacher Corps cycles were involved.

Furthermore, the role of the NCERD Specialist was never made clear vis-a-vis the Director, Acting Director, or other staff members, even though he pressed repeatedly for such clarity. The role appeared to be neither fish nor fowl. The Program Specialist could only recommend and suggest; he had no authority to implement specific practices. Division of authority and responsibility made for cumbersome, and at times extrememly difficult, implementation.

A third difficulty involved the fact that there proved to be a built-in resistance by many students of the type that the San Francisco Teacher Corps Program attracted to the idea of a behaviorally-oriented or competency-based approach to education. (See Intern Comments in the Results section of this report.)

A fourth difficulty was a considerable amount of confusion and lack of clarity concerning staff roles and responsibility in general, due again to the lack of a permanent Director as well as the hiring of too many people for the amount of work to be done.

Nevertheless, the NCERD Program Specialist attended regularly, on a weekly basis, the department meetings of the Elementary Education Department. A continuing series of informal and formal discussions were held with various members of the department in order to explore the following:

*The establishment of a more effective and continuous feedback system to the department as regards any program decisions made within the Teacher Corps program.

*Some means of on-going evaluation, by selected Elementary Education faculty members, of Teacher Corps teacher training efforts with regard to the development of various competencies in students.

*The establishment of a more widely accepted and justified basis for the selection of competencies to be included in the Teacher Corps training program.

*Exploration as to the gradual inclusion of new developments and innovations into the present program. Innovations explored included:

1) The creation of an on-going center for innovation in the School of Education to which all projects could contribute materials, manpower, and other support.

2) The provision for consultants, demonstrations, workshops, to be on call to the School of Education and provided by the center described above.

3) The exploration of new and innovative relationships with various school districts in the Bay Area. Possibilities considered included:

    a) College classes held on-site in elementary schools

    b) Differential placement of students in school settings

    c) Joint planning with districts on matters of teacher preparation

    d) Establishment of "model" or demonstration schools, and/or teachers and classes

    e) Provision for systematic inservice training on a continuing basis

    f) Development of new staffing formulas to allow and encourage different supervisional patterns

    g) Creation of "clinical professorships" (i.e., joint appointments of college faculty to teach part-time in an elementary school setting and part-time at the college, such teaching to be intimately related to both college and school district teacher training objectives.

4) Inservice training of selected elementary department staff members in order to familiarize them more thoroughly with Teacher Corps efforts and innovations, and accordingly gain their support for such efforts. Possibilities explored here included:

a) Cooperative planning with other departments in the School of Education to bring about institutional change.

b) Use of other agency resources, such as piloting Far West Laboratory minicourses.

c) The combining of interested staff from the Elementary Education Department and Cycle 5 Teacher Corps to create and develop innovative methods and materials for teacher training.

d) Released time for selected members of the Elementary Education Department to work on special interests, plan in teams, attend conferences, and participate in special interest groups.

5) The establishment of a systematic, detailed series of transitional steps by which the present elementary teacher training program can be converted to a modular, competency-based program. This was envisaged as occuring in several stages:

a) Stage I -- Planning

Series of intensive meetings to discuss overall goals and transition steps. Development in writing of Pert Chart to indicate additional phases in the change process.

b) Stage II -- Pilot

Tryout and evaluation of innovations conceptualized during Stage I.

c) Stage III -- Revision

Based on evaluation results at State II, revision of program components and innovations. Tryout and evaluation of revisions.

d) Stage IV -- Development

Installation and evaluation of revised and refined components and procedures as widely as possible.

e) Stage V -- Preservice

Inservice training for future Cycles based on evaluation findings from Stages II - IV.

f) Stage VI -- Performance

Initiation and development of new Cycle program, largely competency-based in nature.

6) Finally, the NCERD Program Sepcialist met with representatives of the Design and Industry Department in the School of Creative Arts at the College. Two graduate instructors, working under the direction of Dr. George Champion, Director, Center for Technological Education, developed a course outline and series of clusters for a course entitled "Interdisciplinary Technology Workshop". A copy of this outline and sample cluster, entitled "Wood Technics" is included in Appendix C.

3. Evaluation of interns became a bone of contention among the Cycle 5 staff and interns very early in the fall semester. There were wide differences in opinion both within the staff, within the intern group and between staff and interns. The NCERD specialist submitted several drafts of different kinds of evaluation devices for staff and intern consideration, with the final choice decided on being a measure of strengths and weaknesses, as evidenced by responses to short-answer, open-ended questions. A copy of this device is shown in Appendix D. Interns were evaluated with this device at the beginning and end of Spring, 1971 academic semester by team leaders and staff members. The number of comments under "Strengths" for each item doubled while the comments for "Weaknesses" were reduced by half.

4. The post-evaluation of all interns took place in early June of 1971, using the instruments described earlier. A summary of the results of this data is presented in Part IV of this report.

IV. RESULTS

A. Intern Comments

Listed below are a representative sampling of the comments of interns about various aspects of the San Francisco State Teacher Corps Program. The number in parentheses preceding the comment refers to:

(1) pre-service responses
(2) post-preservice responses and
(3) post-inservice responses.

(1). "Competency-based teacher education places more emphasis on performance and product . . . appreciate the idea of direct experience as a learning process, coupled with directed objectives. . . ."

(2). "I feel much of the competency-based program has been shadowed by often meaningless busy work which is time consuming and often distracts from on-site learning."

(1). "Appears to be good but how do you move from module to module; does a test really measure my competency?"

(1). "Concern and respect for the children of low-income and minority families is long overdue."

(2). "Competency-based teacher education seems somehow more stimulating to the teacher. The student will probably benefit more than through the old method."

(1). "I have mixed feelings."

(2). " . . . only one of our courses is competency-based. The program is a failure--community participation is nil, program is very disorganized."

(1). "This method could be carried further to be used within the classroom of the public schools. . . ."

(2). "I would like time for more school and community involvement and devote less time to the college scene."

(3). "Within the last few months this program has become more innovative and individualized than in the preceding months. However, there are still difficulties in trying to be 'innovative' in a pre-established 'system.' . . . course content is more relevant and enriching. . . ."

(1). "Competency-based teacher education engenders feelings of worth and a realistic assessment of the student's abilities and interests. . . ."

(2). " . . . since the competency-based aspect, I have become more logical and more able to deal with the classroom situation. . . ."

(1). "Competency-based teacher education adapts to the needs and time patterns of each student and will result in revolutionary changes in the educational system all over the country. . . ."

(1). "Competency-based teacher education can only be successful if one has the community in which he is teaching to back him up . . . must find a way to break down the traditional method first. . . ."

(2). "We have not had much experience in actual classroom situations. . . . program as a whole is still not very well organized in terms of courses that will be taught and administrative matters."

(3). " . . . competency-based program has helped me in terms of writing lesson plans, behavior objectives, and so forth. . . . the most important area of the program is to train us to be good teachers, which the staff has not provided us so far."

(1). "Allowances are made for the 'slow' learner whose motivation and interests have hitherto been ignored and unattended to. It is important to believe that everyone can be motivated--all one has to do is find the right gimmick."

(2). "Program is unorganized and does not seem to always follow guidelines. . . . defining doesn't mean one can really do something. . . ."

(1). "This is my first real introduction and I reserve my opinions until I have seen it working in a classroom. . . ."

(2). "I like the feeling of achievement that it gives me . . . we often get tied in knots because something gets hung up administratively. . . ."

(3). "Somehow I don't think we have mastered writing relevant behavioral objectives for ourselves. . . . I went to visit other classrooms and this gave me a great deal of fire and stimulation to try new ideas. . . . I had already been warned that the program would be a hassle; as long as I can become a good teacher in spite of the hassles, I am satisfied. . . . We need to work out more relevant stuff for behavioral objectives, be sure to cover all subject areas, build up a repertoire of things for children to learn with."

(1). "Competency-based teacher education is more responsive to the needs of the individual child . . . in favor of the constancy of achievement with variation of time and placement of emphasis on competency measurement after instruction. . . ."

(2). "We need more involvement with children in the schools in the form of observational experiences . . . some aspects lack relevance to prepare me to teach in low income areas. . . . Program is not as organized as I expected."

(1). "Competency-based teacher education is the only kind of change that will save the educational system in this country, if it is to be saved at all."

(2). " . . . Some confusion as to the definition of competency-based programs . . . sounds good on paper . . . it is difficult to accept changing rhetoric without experiencing many of the changes. . . ."

(3). " . . . the longer I am in Teacher Corps the more I am disillusioned. The program is a microcosm of the general problems on every level: (1) irrelevant information, (2) artificial methods of dealing with children, (3) incompetency in direction and leadership, (4) inability to treat students as thoughtful, contributing human beings, (5) breaking contractual agreements, (6) general individualistic, non-community oriented philosophy, and (7) general lack of concern for people as humans."

(1). " . . . competency-based teacher education is great--we've known about it for a long time--try and implement it in any real way and zap!"

(2). "The competency-based aspects are great. The problem for me is: our module program requires time, community things requires time, my on-site school observing takes time, and the end result is that I developed a slipshod attitude towards the whole thing."

(1). "Within the concepts of these new trends all of the new technology can be put to full use. With the aid of the new materials and concepts, teachers will be able to really learn how to teach fully. A teacher can become a guide to free the child for more learning."

(3). " . . . several reforms have a chance of being accepted by the Faculty: on-site instruction, individualized programs, student participation with curriculum design, and student participation in governing the operation and goals of his education. . . ."

(1). "I like the emphasis on children accompanying methodological instruction. A danger in shifting from the traditional program is that the modules aren't completely developed so that basic information about teaching ideas and strategies in math, reading, language arts, are not available."

(3). "(1) I like the idea of competency-based education. I just haven't found out how to teach it; (2) my expectations are no worse than I expected; (3) a particular problem here is the administration."

(1). "This new approach to teaching allows the instructors to individualize more with each student, and thus, more personalization. This approach, I think, would enhance the student's retention rate and motivate him to learn, by doing it for a friend (teacher). Also, I think, this approach would enhance the student's self-image by having the teacher work on a one-to-one basis."

(2). "I feel that the analysis of teaching strategies, planning, and demonstration of competencies is most essential to effective teaching. Also, application of competency-based teacher education techniques will instill a constant re-evaluation of teaching methods. . . . competency-based teacher education will professionalize teacher education and expand the minds of teachers and students."

(3). " . . . the program is good, but in actuality very difficult to implement. Most of the major difficulty arises from lack of communication between on-site instructors, team leaders, master teachers, etc. So much of the instructional time was wasted on trying to agree on how to evaluate interns that the instructors didn't spend enough with the interns instructing."

(1). "Competency-based teacher education will give to the teacher--as well as the children--a view of the learning of the children, and a look at the teacher as to how many materials can be used in that class."

(1). "The schools, on any level of education, cannot exist any longer as institutions which have no contact with the community and/or other institutions. The multi-institutional concept and the instructional module plans, I agree with strongly--the other ideas seem to facilitate the operation of these principles."

(2). "I don't think the total program has been nearly as effective as it should be--interns are too bogged down with scholastic requirements, program details, school district coordination, etc., to be as creatively concerned with competency-based education as I feel they should be."

(1). "A teacher must be committed to his job, first of all . . . be willing to give his time . . . take a child's interest in developing his learning situation. Personalized instruction gives a teacher the opportunity to better understand and help a child."

(2). "I like the competency-based aspects of the program . . . helps to know exactly what we are doing and where we are going . . . helps to plan things better . . . helps my teaching tremendously. There is the pressure of the time factor. We have to set priorities."

(3). " . . . competency-based aspects are ideal and excellent, but rather time consuming . . . one big problem is the pressure of time. I feel that one cannot achieve to the best of one's ability either academically or practically. One has to make choices of priorities."

(1). "I believe that the competency-based program, if adopted in a widespread manner by teacher-training institutions, could be the vanguard (so to speak) of revitalizing and making education (at all levels) a relevant and exciting experience."

(2). "Only one course is competency-based; my feelings for the most part are very negative (60-75% of the time on meaningless academia, 30% in the on-site school, little or no community involvement, or even time for it! Teacher Corps had better get its priorities together."

(1). "The competency-based teacher education program manifests an extremely significant method of accentuating the need for developing creativity, individual thought, a relaxed and tension-free environment for learning within the educational process. I especially like the idea of bringing in the community and other parties that are directly concerned with students and aware of their various needs."

(1). "I feel that competency-based teacher education is the answer to better qualified teachers. I like the exit requirement as opposed to the entrance requirement idea. Through this method of selection, I feel one is more able to judge who is better qualified."

(1). "Basically, the system appears sound: to let the student's individual aptitudes and motivational factors determine the pace of learning and the sequential order."

(1). "This new program is to help the child want to learn or be motivated to help someone learn. I am very pleased with this."

(2). "I like it--overall, it helped me as a person--a new way to see teaching."

(1). "I applied to Teacher Corps in large part because I feel something new, different and innovative has to be brought to the educational scheme if we are to survive educationally. There are a number of teachers who are literally destroying children because of their methods of imparting knowledge."

(1). "The new trends in teacher education are greatly needed and are late in appearing in educational settings. From experience, the new trend of education can only be successful it it is structured and followed through well. The competency-based program should be workable, but it must be relevant to student situations."

(2). "The competency-based program that I have experienced sometimes become repetitive. The competency-based program has helped me evaluate myself. The program is good, in that it gives one a M.A. degree, while paying you a stipend and gives one on-the-job training. It was deceitful in health benefit promises, wages being paid on time and the tremendous busy work aspect."

(3). " . . . competency-based program would have been valid if there had been a form of evaluation to follow up lectures and hand-out materials . . . community aspect has turned into a farce . . . have not come close to giving 12 hours a week to the community."

(1). "The new humanistic approach gives the child and teacher more expression and creativity in his learning. The child will no longer be afraid to open up to the teacher about problems that may or may not be related to his learning process."

(2). "There is just not enough time to do a high quality job and all three aspects (academic learning, participation in school and community) and still remain human. One is told to set priorities, but if one is committed to education, children, family and academic learning, it is very difficult to maintain a positive self-image if you must give a low priority to something you feel is really worthwhile."

(3). " . . . idea of competency-based is used different ways by different people. It seems to me that all education should be based on competency. I expected more organization and direction in the program. I liked the extended exposure to children . . . there has been too much destructive interaction among the staff. Too much of the interns' energies are used up in planning our own program and working out problems among the staff. . . ."

(1). "Until the attitudes of teachers, administrators, parents and community are responsive to the need for change in the present system, not a hell-of-a-lot of learning or teaching will go on. Hopefully, the competency-based program would begin to turn on some teachers to be responsive to the needs of their students, and certainly, their own preparation."

(1). "The child's needs and self-image are enhanced greatly by this program, mainly because it shows him someone really cares about him outside the home. . . . the new trends in teacher education can help this child with the needs he lacks, possibly a feeling of worth."

(1). "The dual concepts of self-pacing and increased exposure to actual classroom situations are two vital elements in assuring a faster and more successful development of truly competent classroom teachers. My response would be that on paper it sounds superb, but in fact its success would depend largely on the competence and diligence of the teacher who was administering it."

(2). "With reference to the whole program, I am disappointed: (1) the program is highly disorganized and the chains of command are totally ill-defined; (2) personality conflicts have promoted a feeling of distrust, fear, and anxiety in me; (3) internal politics seem to add to disorganization, distrust and inability to gain maximum knowledge."

(1). "My general feeling about what the trend of education today should be was expressed quite well throughout the presentation. I noticed that the other nine trends did not differ that much from the competency-based program."

(3). " . . . competency-based aspects required extreme discipline from all levels. There have been a lot of disappointments, but this is expected in a program such as this. . . . Problems revolve around the weaknesses of community-based programs not being tied to the competency-based programs."

(1). "I don't know much about teacher education at all. I went to college where I was taught on a competency-based program and I like it."

(2). "Sometimes it's not really what I think competency-based education should be, but merely programmed (like computerized education). I prefer more individualization."

(3). "Competency-based education is a good idea; however, the emphasis seems to be on general subjects to be taught in the schools and not enough emphasis is placed on the intern's skills . . . this idea of the intern meeting the needs he had when he entered Teacher Corps has been completely put aside. . . . My team leader and faculty adviser were really making Teacher Corps worthwhile."

(1). " . . . the trend is good, in fact, ideal. What is difficult is to train future teachers toward these goals, especially when they themselves have been taught in a drastically different manner. If to 'teach' means bringing about growth in children, then that is ideal."

(2). " . . . very useful and a productive way to innovation. The structure is very strongly enforced, but in the beginning it lacked organization. The program has begun to give me a firm foundation from which to begin as a teacher."

(2). " . . . competency-based doesn't freely come to grips with the attitudinal and value experiences in a learning situation. The opportunities to utilize the competency-based techniques are few and far between. Overall, the program is promising for me, if I can adapt the input to fit my ability without too much interference and petty structure."

(3). "The competency-based aspects are still in its developmental stages. It still leaves a lot to be desired in terms of the clarity of direction presented by the staff. I see competency-based education in smatterings developed by different people each with a varied viewpoint. Nonetheless, the exposure I've had to competency-based education has given me a glimpse at the possibilities it has as a sensible method of curriculum development and instruction. . . ."

(2). "I am in favor of the continuation of the competency-based teacher education. . . . The purpose and objectives of the program have never been doubted and are very clear in my mind. Now I can see real progress in myself and those around me."

(3). "I feel competency-based on-site training is by far the best method for teacher education. The program is not bringing about changes in the traditional program. A major problem has been intern-staff communication of problems to each other."

(2). "So far I have felt highly frustrated and overburdened. The module clusters are well organized and I can relate to them, but there are simply too many. The competency-based aspect of the program, I feel, will help me become a better teacher if I can assimilate all the material being presented. The program as a whole has fallen short of my prior expectations. Much is expected, but is it a realistic expectation on Teacher Corps part?"

(3). "The competency-based aspects have not been fulfilled by the staff. . . . There has been little or no consistency in those people who have been assigned to give us the experiences necessary for competency-based teacher education. Communication between staff and interns is muddled. Our training has lacked proper or enough curriculum input. My expectations are about nil at this point. . . ."

(2). "I feel competency-based education is the thing for better education. I feel the Teacher Corps locally is not totally committed to the interest of the intern. There should be some concern for individual needs."

(3). "Elementary education has not kept pace with the progressive trends . . . I think we must move away from the standard 'all white' middle class approach to education and attempt to make education relevant to other cultural groups. The problem area seems to be in providing an education that is stimulating and meaningful to elementary school children, especially in the areas of social science and language arts. . . ."

(2). " . . . As yet I cannot evaluate its potential success or failure. Intellectually, I support competency-based education very much, . . . I somehow hoped for more guidance and training dealing with low-income families--psychology, discipline problems, etc. . . ."

(3). "I feel that the Teacher Corps program has spent too much time on administrative problems and has generally been disorganized, but I do have deep hope that the coming year will be extremely successful."

(2). "I feel that the experiences that I have had in Teacher Corps thus far have enlightened me more on areas of: (1) the disorganization of the program, and (2) the inconsistencies of Teacher Corps guidelines. I don't feel that the entire staff is trying to help us (interns) very effectively through this program. . . . Competency-based aspects don't all seem to tie in with what I'm doing now in the classroom."

(2). "The personality of the Teacher Corps staff is overall compatible to me. . . . All of the personality differences are not intolerable or damaging to the actualizing of my potential or to the success of this program. . . . The courses given to us are starting to show promise of becoming relevant. . . . The attitude of my peers is generally a healthy positive outlook. My team and team leader interactions are very favorable, creative, exciting, and honest. . . ."

(3). "Once again, a semester of inadequate instructions or direction from the staff at the college . . . . Whatever was learned, happened in the classroom setting of the elementary school."

(3). "My feelings concerning competency-based education are mixed. The positive feelings deal with the agreement that objectives and goals are a necessary element in maintaining a perspective of direction. The negative aspects, however, are centered in the area of 'not seeing the forest for the trees'--too much activity in educational philosophy may prohibit actualizing potential. My peers for the most part are people of integrity, warmth, intelligence, concern for others, and responsible. The staff has shown attempts to bend with the demands of the interns to implement social and educational changes. . . ."

B. Intern Ratings and Attitudes

The tables which follow present the results obtained from use of the rating scales, that is, the tables provide the following:

(1) Mean scores obtained from all interns who respond to a particular item (perceptions of traditional programs, perceptions of ideal competency-based program, perceptions of competency-based aspects of San Francisco's program, perceptions of his total program, and perceptions of his knowledge about competency-based teacher education) at a given testing (1: pre-service; 2: post-preservice; and 3: post-inservice); these scores are found under the heading Mean Score; and

(2) Mean scores obtained from only those interns who responded to a particular item at each testing (pre-preservice, post-preservice, and post-inservice or post-preservice and post-inservice; these scores are found under the heading Mean Score. Because of the nature of this study, no statistical analysis is provided here. However, a rather brief explanation of the findings is presented.

1. Intern Ratings Regarding Competency-Based Teacher Education

The figures in the table below represent pre-and post-inservice Mean Scores of the interns of (a) traditional teacher education programs; (b) competency-based teacher education programs; (c) the competency-based aspects of the San Francisco State Program; (d) the San Francisco State Program in general; and (e) the interns' knowledge about competency-based teacher education.

TABLE I

Mean Scores Obtained from San Francisco State College Intern Ratings Regarding Competency-Based Teacher Education

Item	Testing	N	Mean Score	N	Mean Score
Traditional Programs	1	33	2.88	18	3.00
	2	30	2.43	18	2.33
	3	34	3.12	18	3.33
Ideal C-B Program	1	33	8.18	18	8.33
	2	30	7.37	18	7.39
	3	34	6.91	18	6.67
C-B Aspects of Program	2	30	5.87	26	5.81
	3	34	5.12	26	5.31
Total Program	2	30	5.17	26	5.15
	3	34	5.38	26	5.73
Knowledge About C-B	2	30	5.37	24	5.29
	3	32	5.69	24	5.63

Responses from the Cycle 5 interns indicate very negative feelings about "traditional programs" (3.00, 2.33, and 3.33) and very positive feelings about "competency-based programs" (8.33, 7.39, and 6.67). The data, therefore, suggest a very marked difference of feelings toward the two approaches with their views concerning competency-based approaches being the much more positive. With regard to their feelings about the "competency-based aspects" of the San Francisco State Program, (5.15 and 5.73), interns were only slightly positive. Even so, the Mean Scores in those two categories were substantially higher than those obtained relevant to traditional programs. Mean Scores of 5.29 and 5.63 suggest that interns viewed themselves as having somewhat limited knowledge about competency-based instruction.

2. Intern Attitudes Toward Teaching

Intern responses on this measure were scored according to a key; that is, the discrepancy between intern rankings and the key rankings was determined for each item. Thus, total agreement between the key and an intern's ranking of the options provided for any one item resulted in a score of 0 while total disagreement resulted in a score of 4. Consequently, the range of possible total scores was 0 (total agreement on every item) to 176 total disagreement on every item). Therefore, the lower the score, the more competent the intern would be said to be with regard to subject matter competence, teacher-pupil relationships, classroom management, and human relations. The mean scores obtained from interns are presented in Table 2 below:

Table 2

Mean Scores Obtained from Intern Responses to the Teaching Situation Reaction Test

Testing	N	Mean Score	N	Mean Score
1	31	93.29	15	92.67
2	29	93.48	15	92.80
3	34	89.29	15	89.47

3. Intern Attitudes Toward Low-Income, Minority Persons

Table 3

Mean Scores Obtained from Interns Responses to the Cultural Attitude Inventory

Testing	N	Mean Score	N	Mean Score
1	33	166.61	18	168.06
2	30	171.67	18	174.67
3	34	174.38	18	176.56

B. Intern Ratings and Attitudes

The tables which follow present the results obtained from use of the rating scales, that is, the tables provide the following: (1) mean scores obtained from all interns who responded to a particular item (perceptions of traditional programs. perceptions of ideal competency-based program, perceptions of competency-based aspects of San Francisco program, perceptions of his total program, and perceptions of his knowledge about competency-based teacher education) at a given testing (1: pre-preservice; 2: post-preservice; and 3: post inservice or post-preservice and post-inservice; these scores are found under the heading Mean Score. Because of the nature of this study, no statistical analysis is provided here. However, a rather brief explanantion of the findings is presented.

V CONCLUSION

Because of intern "attrition" and the refusal of some interns to respond to the TSRT, those from whom data were obtained did not constitute a representative sample. Consequently, no statistical analyses were computed. However, the following observations do seem reasonable albeit somewhat tenuous with regard to the "pre-post" data. Although marked differences appeared in only two programs, in six of the seven programs intern response mean scores were lower--"better"--at the end of the first year of inservice than at the beginning of preservice. In addition, in three of those cases, scores were also lower at the end of preservice than they were at the beginning of preservice. With regard to the seventh program, the increase was quite slight. Overall, it does appear appropriate to suggest that, by and large, interns did improve until one considers the research which indicates that student teachers--a group comparable to the interns--very often become significantly more negative in their attitudes during student teaching--an experience important when viewed in the light of the more usual finding--more negative attitudes after the field experience.

As with the TSRT data, the CAI data should not be considered as coming from a representative intern sample. Thus, no statistical analyses were performed. However, several brief observations regarding the "pre-post" scores--Mean Score^2 data--appear appropriate although perhaps tenuous. In all seven programs, intern mean scores were higher at the end of the first year of inservice than they were at the start of the preservice period. And in all but one program, it was also the case that mean scores were higher at the end of the preservice period than at the beginning. This suggests that during their intership, interns became somewhat more positive in their attitudes toward low-income, minority persons. That this is the case is all the more meaningful when it is noted that intern attitudes were quite positive initially. Given the goals of Teacher Corps, this seems an important finding.

In summary, then, the following appear to be reasonable conclusions: (1) clearly the interns tested had much more positive perceptions concerning competency-based teacher education than they had concerning traditional approaches; mean scores obtained for competency-based programs ranged from 6.00 to 8.33 while those obtained for traditional programs ranged from 2.15 to 4.43 indicating a rather marked difference in perceptions; (2) except in the case of two programs, interns had a somewhat neutral or slightly positive view of the competency-based aspects of their own programs; (3) for the most part, interns had a rather neutral or somewhat positive perception of their programs as a whole; and (4) by and large, interns felt reasonably knowledgeable regarding competency-based teacher education.

VI RECOMMENDATIONS

1. That the role of the NCERD Program Development Specialist, vis-a-vis other staff members and the Director, be clearly defined at the outset. Clear lines of authority and responsibility should be established early. Unless the NCERD Specialist has the necessary authority to accompany his responsibilities, program implementation is made most difficult.

2. That commitment on the part of any particular Teacher Corps program to implement and maintain the competency-based aspects of the program for at least two years be assured prior to funding. (The discontinuance of the NCERD Specialist's role in the San Francisco State program has resulted in a downgrading of the program's competency-based aspects.)

3. That staff to be involved in a competency-based program be hired only after familiarization with the expectations such a program involves. This is particularly important with regard to Team Leaders and/or other staff who work on-site, since their reinforcement is crucial to the success of the program.

4. That funds be provided for a series of ongoing inservice learning sessions to be held by the Program Specialist with the cooperating teachers on-site in order to inform and assist them with regard to the competency-based aspects of the program and to secure their cooperation and support.

5. That funds be provided for a series of on-going familiarization seminars be planned for in any future proposals to allow the NCERD Specialist to work on a continuing basis with interested members of the School of Education.

6. That the majority of, if not all, instruction be held on-site (in the participating schools) so that the relevancy of competency-based instruction can be continually demonstrated to interns - in - training as well as inservice school staffs.

7. That careful thought be given to implementation of a competency-based approach. Unless staff members are willing and able to hold interns responsible for the demonstrating the mastery of previously-agreed on competencies, all is for naught.

8. That evaluation of intern progress be continuous, using a wide variety of different kinds of measures.

9. That the notion of competency-based instruction be broadened to include a definition of competency as being either the demonstration of a desired behavior, the creation of an intended product, as the participation in an intended experience, as seems appropriate to attain a particular end (objective).

APPENDIX A

RESOURCE MATERIALS

Beatty, Walcott H., (ed.), Improving Educational Assessment. Washington, D. C.: Association for supervision and Curriculum Development, 1969.

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Storey, Arthur G., *The Measurement of Classroom Learning.* Chicago: Science Research Associates, 1970.

Model Elementary Teacher Education Project Phase I Final Reports

Program development specialists and project directors saw the Model Elementary Teacher Education Project Phase I final reports as being very helpful as they designed their program and built instructional modules. The models are available in honeycomb bindings from the Government Printing Office, (GPO; The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402) and in hardcover or microfiche from the ERIC system (EDRS, The National Cash Register Company, 4936 Fairmount Avenue, Bethesda, Maryland 20014). The reports available, their GPO and EDRS order numbers, and their prices are listed on the next page.

Syracuse University	Order No.	Price	ED No.	Hard Copy	Microfiche
Volume I	FS 5.258:58016	$4.50	-----	---------	----------
Volume II	-------------	-----	026 301	$14.85	$1.25
University of Pittsburgh	-------------	-----	026 302	13.55	1.25
Florida State University	FS5.258:58017	2.50	025 495	10.60	1.00
Volume I	-------------	-----	--- ---	------	----------
Volume II	FS 5.258:58018	2.00	027 283	8.70	.75
University of Georgia	-------------	-----	--- ---	------	----------
Summary	FS 5.258:58019	3.50	025 491	14.85	1.25
Northwest Regional	-------------	-----	025 492	1.50	.25
Educational Laboratory					
Overview and Specifications	FS 5.258:58020	6.50	--- ---	------	----------
Appendix	-------------	-----	026 305	7.65	.75
A: Taxonomy of Learner Outcome					
B: Conceptual Model for Teaching Elementary Math	-------------	-----	026 306	.55	.25
C: Content Model for Teaching Elementary Math	-------------	-----	026 307	1.70	.25
D: General Task Analysis and Behavioral Objectives	-------------	-----	026 308	1.70	.25
E. General Adaptive Strategies	-------------	-----	026 309	.70	.25
F: Interpersonal Competencies	-------------	-----	026 310	1.25	.25
G: Basic Training Model for ComField Practicum	-------------	-----	026 311	.40	.25
H: Sample Task Analysis: Behavioral Objectives for ComField Labortory	-------------	-----	026 312	.45	.25
I: Experimental Model for Preparing to Develop Behaviroal Objectives	-------------	-----	026 313	.65	.25
J: Experimental Model to Enable Instructional Mangers to Demonstrate Interaction Competency	-------------	-----	026 314	4.50	.50
K: Trial Form of an Instrument for Evaluationg Instructional Managers in the Practicum	-------------	-----	026 315	1.40	.25
L: A Sequence for the Practicum	-------------	-----	026 316	.45	.25
M: Research Utilitzation and Problem Solving	-------------	-----	026 317	.60	.25
N: Implementation of Rups System in a Total School District	-------------	-----	026 318	3.20	.50
O: The Human Relations School	-------------	-----	026 319	2.20	.25
P: Categorical Breakdown of Interpersonal Area	-------------	-----	026 320	1.05	.25
Q: Educational Leaders Laboratory	-------------	-----	026 321	.30	.25
R: A Basic Communication Skill for Improving Interpsonal Relationships	-------------	-----	026 322	.30	.25
S: Broad Curricular Planning for the ComField Model Teacher Education Program	-------------	-----	026 323	.75	.25
T: Personalizing Teacher Education	-------------	-----	026 324	.85	.25
U: Self-Concept and Teaching	-------------	-----	026 325	.55	.25
V: Charting the Decision Making Structure of an Organization	-------------	-----	026 326	.70	.25
W: Cost Analysis in Teacher Education Programs	-------------	-----	026 327	.70	.25
X: ComField Information Management System	-------------	-----	026 328	.80	.25
Y: The Integrated Communications Experiment (ICE) Summary	-------------	-----	026 329	.80	.25
Z: Classes of Measures Used in Behavioral Sciences, Nature of Data that Derive from Them, and Comments as to the Advantages and Disadvantages of Each	-------------	-----	026 330	.75	.25
Teachers College, Columbia University	-------------	-----	026 331	.40	.25
University of Massachusetts	FS 5.258:58021	4.50	027 284	26.95	2.00
University of Toledo	FS 5.258:58022	4.50	025 490	26.65	2.25
Volume I	FS 5.258:58023	7.00	--- ---	------	----------
Volume II	-------------	-----	025 457	12.80	1.00
Michigan State University	-------------	-----	025 456	34.85	3.00
Volume I	-------------	-----	--- ---	------	----------
Volume II	FS 5.258:58024	5.00	027 285	31.35	2.50
Volume III	FS 5.258:58024	5.50	027 286	37.95	3.00
	FS 5.258:58024	5.00	027 287	29.65	2.25

APPENDIX B

Sample Clusters

Teacher Corps
Jack R. Fraenkel
San Francisco State College

Cluster #3

The Selection of Subject Matter (Content) For Use in Social Studies Units and Courses

Module 3-1 Objective: Given appropriate instruction and/or information, you should be able to state (orally, or in writing) at least six examples of criteria that can be used as guidelines for selecting content for inclusion in social studies courses.

Prerequisites: None

Preassessment: See page 8

Learning Activities:

- a. Read excerpts from Fraenkel
- b. Attend class
- c. Interview with instructor
- d. Interview with Team Leader
- e. Student option

Evaluation: State (verbally or in writing) at least six examples of the criteria as described in the objectives.

Criterion of Acceptance: Okay by Team Leader

Module 3-2 Objective: Given appropriate instruction and/or information, you should be able to distinguish among facts, concepts, generalizations, and thought systems, and demonstrate what these terms mean by offering examples of each.

Prerequisite: See page 9

Learning Activities:

a. Read excerpts from Fraenkel
b. Read Taba Handbook, Chapter 4
c. Read Lewenstein, pp. 82-88
d. Interview with Instructor
e. Interview with Team Leader
f. Attend class
g. Student option

Evaluation: Give three examples of each (facts, concepts, generalizations, thought systems) verbally or in writing.

Criterion of Acceptance: Okay by Team Leader

Module 3-3 Objective; Given appropriate instruction and/or information, you should be able to differentiate examples of concepts and/or generalizations of lesser power from those having greater power.

Prerequisite: Modules 3-1; 3-2

Preassessment: See page 10

Learning Activities:

a. Read excerpts from Fraenkel
b. Attend class
c. Interview with Instructor
d. Interview with Team Leader
e. Student option

Evaluation: Retake preassessment test, p. 10

Criterion of Acceptance: Score of 90% or above on test.

Module 3-4 Objectives: Given appropriate information and/or instruction, you should be able to a) explain what course and unit outlines are, and write possible course and unit outlines of your own that you might use at a grade level of your choosing when you teach social studies.

Prerequisite: Modules 3-1; 3-2; 3-3

Preassessment: See page 11

Learning Activities:

a. Read Lowenstein, Chapter IV
b. Read excerpts from Fraenkel
c. Interview with instructor
d. Interview with Team Leader
e. Attend class
f. Student option

Evaluation: Prepare in writing a course outline at a grade level of your choosing for a semester's work. Then prepare in writing a unit outline for one of the units in your course.

Criterion of Acceptance: Grade of "Pass" by the Instructor.

Module 3-4 Objective: Given appropriate instruction and/or information, you should be able to explain what a lesson plan is and write a possible lesson plan at a grade level of your own choosing that has the following characteristics:

- a. Deals with social studies content
- b. Represents one lesson that you could use in one of the units included in your course outline (see Module 3-4).
- c. Meets at least five (5) of the criteria identified as being important to consider in selecting social studies content (see Module 3-1).
- d. Develop an idea (generalization) or concept.

Prerequisite: Modules 3-1; 3-2; 3-3; 3-4

Preassessment: See page 11

Learning Activities:

- a. Attend class
- b. Interview with Team Leader
- c. Interview with Instructor
- d. Student option

Evaluation: Write a lesson plan possessing the above characteristics.

Criterion of Acceptance: Okay by Team Leader

Module 3-6 Objective: Given appropriate information and/or instruction, you should be able to explain what is meant by the concept "rationale," give at least three reasons why a clearly thought out and defensible rationale is important to state when selecting social studies content, and give a rationale for any social studies content you select for instruction.

Prerequisite: Modules 3-1; 3-2; 3-3; 3-4; 3-5

Preassessment: See page 12

Learning Activities:

a. Read excerpts from Fraenkel
b. Read Stevens and Morrissett
c. Attend class
d. Interview with Instructor
e. Interview with Team Leader
f. Student Option

Evaluation: Prepare in writing a defense (i.e., state the rationale behind) of the lesson plan you prepared for Module 3-5.

Criterion of Acceptance: Okay of Team Leader

Preassessment

Module 3-1

1. Explain the meaning of the term "criteria" as you think it applies to the selection of social studies content.

2. Give at least six (6) examples of criteria that you would use as a basis for selecting content for use in social studies lessons.

Preassessment

Module 3-2

Define each of the following terms and give an example of each:

- fact
- specific concept
- abstract concept
- generalization
- frame of reference
- rationale
- thought system

Preassessment

Module 3-3

SELF-TEST

Listed below are several pairs of concepts or generalizations. Place an X in front of the concept or generalization that is the more powerful in each pair.

1. A. ____urbanization
   B. ____city

2. A. ____change
   B. ____democracy

3. A. ____court
   B. ____dissent

4. A. ____family
   B. ____interdependence

5. A. ____conflict
   B. ____dispute

6. A. ____Several cultures in Latin America influenced and were influenced by foreign conquerors.
   B. ____Cultures change in varying degrees when they come in contact with another culture.

7. A. ____The wide variety of characteristics found among the states of the United States of America reflect the Varied cultural background of the peoples who settled in them.
   B. ____Though all cultures possess certain unique features, they are also similar in a number of ways.

8. A. ____Man's ways of living affect, and are affected by the physical and social enviroment in which he lives.
   B. ____Certain inventions of early man revolutionized his way of life.

9. A. ____Societies sometimes punish those who question established values.
   B. ____The daily activities of the ancient Greeks and Romans reflected their values.

10. A. ____The changes that occurred in Western Europe after the fall of Rome came about as a result of many interacting factors.
    B. ____Pressures for change develop from many sources.

11. A. ____Men continually seek to improve their condition through obtaining those rights they consider essential to their welfare.
    B. ____Many groups in the American society have continually striven to promote their own well-being as they have defined it.

Preassessment

Modules 3-4; 3-5

Defines each of the following terms:

course outline

Unit outline

lesson plan

Preassessment

Module 3-6

I. Place an "O" in front of any statement below which represent objectives and an "R" in front of any statement which represent a rationale.

1. ____Exposed to two or more different samples of information, the student correctly states differences and similarities among those samples.

2. ____Presented with detailed set of facts, students can state valid generalizations that they had not been given previously, and when asked, can provide the sources and limitations of the generalizations.

3. ____Given a set of events (one of which is identified as the event to be explained) occurring in a social setting, the student gives a plausible and logically sound explanation of the chains of cause-and-effect relationship that resulted in the occurrence of the event.

4. ____Students indicate comprehension of the meaning of a given number of ideas and concepts.

5. ____Students will occasionally make comments in a discussion session that depart significantly from the rather general agreement of the class as a whole, and which are judged by the teacher to have some likelihood of leading to useful relationships or conclusions.

6. ____Ability to relate one's own values to those of others is crucially important in any inquiry directed at clarification or resolution of value conflicts.

7. ____When students can obtain information from maps and globes, they possess a very useful skill for learning about man's activities and enviroment.

8. ____Being able to form hypotheses is essential for anyone who hopes to deal constructively with problems in social studies. Hypothesizing provides a focus for thinking about a problem. One's thinking is likely to be unproductive if the problem is conceived too broadly or if an attempt is made to analyze too many kinds of facts in too many ways all at the same time.

9. ____Understanding the aspirations of people in a society is fundamental the understanding the nature if the society and to an analysis of its problem.

Preassessment, Module 3-6, continued

11. Which of the following statements of rationale for having students learn about the American Civil War of 1861-1865 do you think is most justifiable?

    A. The Civil War is a vital part of our American Heritage, and as such, is something that every student should learn about.

    B. Questions about the Civil War are always asked on College Board Examinations.

    C. Some events from the past are important to know about if one is to become an educated man. The Civil War is one of these events.

    D. Studying about the Civil War may help students to realize that honest men may legitimately differ in the goals which they consider worth attaining.

Teacher Corps
Jack R. Fraenkel
San Francisco State College

Cluster #5

The Teaching and Learning of Concepts

Module 5-1;

Objective: Given appropriate instruction and/or relevant information, you should be able to name at least two different models of education (authority-centered and autonomous learning) that a teacher might endorse, and state (verbally or in writing) several (four or more) ways in which the models differ.

Prerequisites: None

Preassessment: See page 7 (Grade of 100% required)

Learning Alternatives:

a. Read excerpts from Fraenkel.
b. Attend class.
c. Interview with Team Leader.
d. Student option.

Evaluation: Describe (orally or in writing) at least four ways by which the two models mentioned in the objective differ.

Criterion for Acceptance: Okay of Team Leader.

Module 5-2

Objective: Given appropriate instruction and/or relevant information, you should be able to state (orally or in writing) several (more than four) ways in which adherents of the two models discussed in Module 5-1 differ in their assumptions about the nature of thinking, and suggest (orally or in writing) at least two implications such differences would have for classroom teaching.

Prerequisites: Module 5-1

Preassessment: See page 8 (Grade of 100% required)

Learning Alternatives:

a. Read excerpts from Fraenkel.
b. Attend class
c. Interview with Team Leader.
d. Student option.

Evaluation:

a. Explain (orally or in writing) at least four ways in which adherents of the two models discussed in Module 5-1 differ in their assumptions about the nature of thinking.

b. Discuss, in writing (one page limit) at least two implications such differences could have on your own teaching, giving examples if you can.

Criterion for Acceptance:

a. Okay of Team Leader
b. Grade of "Pass" by instructor.

Module 5-3

Objective: Given appropriate instruction and/or relevant inforamtion, you should be able to distinguish among attitudinal, analytic, and synthetic kinds of statements, give examples (at least three) of each kind, and explain how the truth or falsity of each can be ascertained.

Prerequisites: None

Preassessment: See page 9 (100% required)

Learning Alternatives:

a. Read excerpts from Fraenkel.
b. Read Willson, Language and The Pursuit of Truth, Chapter II.
c. Attend class.
d. Interview with instructor.
e. Interview with Team Leader
f. Student option.

Evaluation: List in writing three examples of each kind of statement, explain why they are examples, tell what evidence would constitute support or refutation for each type, and then tell how you would have a student gather such evidence for a typical statement in each category.

Criterion for Acceptance: Grade of Pass by Instructor.

Module 5-4

Objective:	Given appropriate instruction and/or relevant information, you should be able to explain what a concept is, explain what concept attributes and attribute values are, distinguish among conjunctive and disjunctive concepts, and give at least three examples of each.
Prerequisites:	Module 5-3.
Preassessment:	See page 10.
Learning Alternatives:	a. Read excerpts from Fraenkel. b. Read Hunt and Metcalf, Teaching H.S. Social Studies, Chapter IV. c. Read Brandy, Burnett and Smith, Democracy and Excellence in American Secondary Education, Chapter VIII. d. Interview with Instructor. e. Interview with Team Leader. f. Attend class. g. Student option.
Evaluation:	Explain (orally or in writing) the meaning of the terms concept, concept attribute, and attribute values, and give at least two examples of each of these for a conjunctive and a disjunctive concept.
Criterion of Acceptance:	Okay of Team Leader and a grade of 100% on retaking preassessment.

Module 5-5

Objective: Given appropriate instruction and/or relevant information, you should be able to name at least two strategies that you can use to help students learn to formulate and use concepts, describe the steps involved in each of the strategies, explain how they help students to learn or form concepts.

Prerequisites: Module 5-3.

Preassessment: See page 11 (100% required)

Learning Alternatives:

a. Read excerpt from Fraenkel.
b. Read Taba, pp. 87-100.
c. Interview with Team Leader.
d. Interview with Instructor.
e. Attend class.
f. Student option.

Evaluation: Describe in writing the steps involved in concept attainment and concept formation and explain what each strategy does and how it helps students learn or form concepts.

Criterion of Acceptance: Grade of Pass by Instructor and score of 100% on retaking preassessment.

Module 5-6

Objective: Given demonstration of the two strategies discussed in Module 5-6 and appropriate explanation and discussion of the steps involved, you should be able to use each strategy in an actual teaching situation.

Prerequisites: Module 5-5.

Preassessment: Successfully (okay by Team Leader) use the two strategies in actual teaching situation.

Learning Alternatives:

a. Review Fraenkel excerpt.
b. Review Taba, pp. 87-100.
c. Attend class.
d. Discussion with Team Leader.
e. Discussion with other Interns.
f. Student option.

Evaluation: Using social studies subject matter of your own choosing, use each of the two strategies (concept attainment and concept formation) in one of the following actual teaching situations:

a. in an elementary classroom
b. to a fellow intern or group of interns
c. to your Team Leader
d. in C&I class
e. in any other situation acceptable to your Team Leader.

Criterion of Acceptance: Grade of Pass by Team Leader.

Preassessment

Module 5-1

Place the correct letter in front of the models listed in Column I in front of its characteristics listed in Column II.

I

A. Authority-Centered model

B. Autonomous-Learner model

II

____1. Students list, group and label data.

____2. World viewed as relatively fixed and unchanging.

____3. Eternal "truths" believed to exist

____4. Knowledge must be acquired before it can be used.

____5. One's values are strongly influenced by the culture in which one lives.

____6. Teachers define problems.

____7. Students define problems.

____8. Either teacher or student might define a problem.

____9. World considered in a state of continual flux.

___10. Teacher viewed as information transmitter.

Preassessment

Module 5-2

Listed below are a number of assumptions about thinking. Place an "A" after the statement if it reflects a viewpoint to which an advocate of the authority-centered model might subscribe, and a "B" if it reflects a viewpoint to which an advocate of the autonomous learning model might subscribe

(A = subscribed to by advocates of authority-centered model)
(B = subscribed to by advocates of autonomous-learning model)

____1. Thinking skills can be learned.

____2. Students must acquire a considerable amount of information before they can think about that information.

____3. More thinking takes place in a mathematics class than would occur in woodshop.

____4. Some students are unable to think.

____5. Thinking can (and should) be encouraged in any subject.

____6. Experience, age, interest and richness and significance of subject matter, all will affect the quality of thought.

____7. One learns to think by studying the thoughts of others.

____8. Teachers can manipulate a learning enviroment so as to improve student thinking significantly.

Preassessment

Module 5-3

What kind of statement?

Mark A - if an analytic statement (true by definition)
Mark B - if a synthetic statement (true by empirical evidence)

____1. Brazil is located in South America.

____2. Mainland China is a communist country.

____3. All men have two eyes in their heads.

____4. Capitalistic countries in the 19th century were colonial imperialists.

____5. I hate Fascists.

____6. Franklin D. Roosevelt was the 32nd President of the United States.

____7. Some men are immortal.

____8. Policemen are pigs.

____9. Honkies can never understand "soul."

___10. VERSAF is an effective contraceptive device 99% of the time for 99% of a randomly drawn sample of women.

Preassessment

Module 5-4

Listed below are several examples of concepts. Place a "C" after those that can be considered conjunctive, a "D" after those that can be considered disjunctive, and an "R" after those that can be considered relational. (If you aren't sure, refer to a good dicitionary.)

(C = conjunctive concept)
(D = disjunctive concept)
(R = relational concept)

1. ____a "strike" in baseball
2. ____tourist
3. ____climate
4. ____imperialism
5. ____city
6. ____latitude
7. ____an "extra point" in football
8. ____flower
9. ____democracy
10. ____justice
11. ____time
12. ____patriotism
13. ____up
14. ____larger than
15. ____revolution
16. ____interdependence
17. ____blue
18. ____citizen
19. ____to the south of
20. ____battle

Preassessment

Module 5-5

The steps involved in the tasks of concept formation and concept attainment have been scrambled below. Indicate the correct order by numbering each statement in the order it belongs (i.e., place a "1" after the first step involved in the task, a "2" after the second step, etc.)

Concept Formation

a. ____Labelling
b. ____Listing
c. ____Explaining
d. ____Grouping
e. ____Recombining

Concept Attainment

a. ____states a definition of the concept
b. ____repeats word
c. ____views examples and non-examples
d. ____brings in new examples
e. ____selects from array of examples and non-examples
f. ____states major attributes which all examples of the concept possess

MULTI-LEVEL INDIVIDUALIZING LEARNING OPPORTUNITIES IN AN ENRICHED CLASSROOM ENVIRONMENT

Cluster 9: The Learner: Individualizing Learning

9.1 Characteristics of Individualized Learning
9.2 Contract Learning
9.3 Team Learning

Cluster 10: Preparing and Using Materials and Resources for Individualizing Learning

10.1 Self-Directing, Independent Study Aids
10.2 Multi-Media Adapted for Self-Directed Use
10.3 Preparation and Use of Tape-Lessons
10.4 Individualizing Textbook Resources
10.5 Using Published, Individually-Paced, Multi-Level Resources

Cluster 11: Organizing and Scheduling Individualized Learning

11.1 Recording and Reporting Continuous Progress
11.2 Organizing and Scheduling Options
11.3 Collecting and Organizing Resources

Teacher Corps
San Francisco State College
Doris Vallon, March 1971

Multi-Level Individualizing Learning Opportunities in an Enriched Classroom Environment

Cluster 9

The Learner: Individualizing Learning

9.1 Characteristics of Individualized Learning
9.2 Contract Learning
9.3 Team Learning

****

NOTE:

The nature of this cluster is such that the competencies to be met in each module may be met through the learning areas and activities in which the intern(s) are already involved, i.e.:

a) On-site Teaching-Learning Experiences with children

b) Meeting the competencies of other clusters such as:

- Creation and Organization of Classroom Environment
- Integrated Curriculum
- Skill Development: Language Arts
- Skill Development: Math
  and perhaps aspects of these clusters also
- Classroom Interaction and Control
- Diagnosis

****

Cluster 9: The Learner: Individualizing Learning

Module 9.1 Characteristics of Individualized Learning

Objective:

Given appropriate information and/or instruction you will be able to describe in written or oral form three or more unique characteristics of an individualized learning program.

Prerequisite: None

Pre-assessment:

Define (orally or in writing) each of the following terms so that the essential (basic) meaning of each is clear. (Cf.: Pre-assessment sheet at end of cluster.)

Individualized Learning
Individualized Instruction
Contract Learning
Team Learning
Personalized Learning
Multi-Media Learning Centers
Self-Directed, Independent Study Aids
Multi-Level Learning

Learning Activities:

1) Read: Esbensen, Thorward, Working With Individualized Instruction The Duluth Experience, Fearon Pub., Palo Alto, 1968 ($2.75)
2) Read: Howes, Virgil, Individualization of Instruction: A Teaching Strategy
   Individualizing Instruction in Reading and Social Studies
   Individualizing Instruction in Science and Mathmatics, Macmillan Co., 1970 ($3.75 each).
3) Read: Wolfson, Bernice J., Moving Toward Personalized Learning an Teaching, International Center For Educational Development (16400 Ventura Blvd., Suite 339, Encine, CA 91316, $1.75).
4) Read: Periodicals and books (cf. attached list: annotated).
5) Interview teacher using Individualized Learning Strategies
6) Interview Team Leader and/or Instructor
7) Attend Class
8) Listen, look, and note key points from these tapes and slides:
   a. Brittain Acres School: Working Independently Through Learning Package Plans and Options
      Tape Pupil Interviews and Slides or Classroom
   b. Highlands School: Individualized Learning in a Kindergarten Class
9) Use Resource Binder Materials compiled by Instructor, Staff, and Interns on Multi-Level Individualized Learning.

10) Attend Workshop sponsored by California Teacher Development Project on Individualized Instruction (see Instructor for details).
11) Student Option.

Evaluation:

Describe at least three unique characteristics of an individualized learning program in a classroom.

Criteria of Acceptance:

Okay by Team Leader and/or other Staff.

Cluster 9: The Learner: Individualizing Learning

Module 9.2 Contract Learning

Objective:

Given appropriate information, instruction, or experience, you will be able to plan, organize materials, and implement a contract learning experience with an individual student, a group of students, or a class of students, in two or more subject areas. Individual options and competency checks are to be included as inherent parts of the contract.

Prerequisite: Understanding of what the term "contract learning experience" means.

Pre-assessment:

Demonstrate (by example or previously acquired evidence) that you have engaged one or more students in a contract-learning experience which included each of the following:

a) planning with the learner: individual options
b) collecting and organizing materials with learner input for the contract fulfillment
c) helping to pace the learner for success
d) helping to implement the continuous progress
e) evaluating with the learner the completion and quality of work achieved through the contract.

Learning Activities:

1) Read: Shiel's article: "A Self-directed Classroom." (16 pages) (Cf. Multi-Level Learning Reosurce Materials.)
2) Read: Selected portions of Esbensen, Howes, Wolfson and others. (Cf. Module 9.1)
3) Visit a classroom using Contract-Learning to observe formulation and use of contracts.
4) Read: Periodicals (cf. attached list, annotated).
5) Attend class
6) Preview samples of learning contracts available from Instructor in the Multi-Level Learning Resource Materials.

Evaluation:

1) Create or use a contract fomsuitable for the selected learner.
2) Plan with the learner, organize the materials, and implement a contract learning experience in two or more subject areas with one or more learners.
3) Indicate use of options and methods of checking competencies thoughout the contract.

Criteria of Acceptance:

Okay by the Team Leader and/or other Staff on site.

Cluster 9: The Learner: Individualizing Learning

Module 9.3 Team Learning

Objective:

Given appropriate information, instruction, and practice, you will be able to:

a) explain what is meant by team-learning
b) give a rationale for its importance in a given classroom
c) demonstrate team-learning with a group or class or learners.

Prerequisite: None

Pre-assessment:

1) Explain the meaning of the term: team-learning
2) Give at least three reasons, applicable to classroom management, why team-learning might have merit in individualizing learning
3) Prepare, in writing, two or more alternative ways of teaming students for team-learning in a classroom.

Learning Activities:

1) Read in Multi-level Resource Materials:

   a) Durrell, Donald D., Patterns for Team Learning (14 pages)
   b) Poirier article: An Adventure in Heuristics (6 pages)
2) Observe class where team-learning is being used
3) Attend Class
4) Organize a class or group of learners into teams and follow through a lesson or activity with them based on your reading and discussion.

Evaluation:

1) Give (orally or in writing) one or more descriptions of team-learning.
2) Explain (orally or in writing) a rationale for using (or not using) team-learning in a classroom.
3) Demonstrate with a class or group of students for a specified study period of 30-45 minutes, or the morning, or the afternoon, that you can, in fact, organize learners into teams and have them function as teams in a learning situation.

Criteria of Acceptance:

Okay of the Team Leader, and/or other Staff, preferably on site.

Module 9.1 Characteristics of Individualized Learning

Pre-assessment

Define (orally or in writing) each of the following terms so that the essential (basic) meaning of each is clear.

Individualized Learning

Individualized Instruction

Contract Learning

Team Learning

Personalized Learning

Multi-Media Learning Centers

Self-Directed, Independent Study Aids

Multi-Level Learning

Module 9.3 Team Learning

Pre-assessment

1) Explain the meaning of the term: team-learning

2) Give at least three reasons, applicable to classrooom management, why team learning might have merit in individualizing learning.

3) Prepare in writing two or more alternative ways of teaming students for team-learning in a classroom.

MULTI-LEVEL INDIVIDUALIZING LEARNING OPPORTUNITIES IN AN ENRICHED CLASSROOM ENVIRONMENT

Cluster 9: The Learner: Individualizing Learning

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Cluster 10: Preparing and Using Materials and Resources for Individualizing Learning

10.1 Self-Directing, Independent Study Aids
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Cluster 11: Organizing and Scheduling Individualized Learning

11.1 Recording and Reporting Continuous Progress
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Teacher Corps
San Francisco State College
Doris Vallon, March 1971

Multi-Level Individualizing Learning Opportunities
in an Enriched Classroom Environment

Cluster 10

Preparing and Using Materials and Resources for Individualizing Learning

10.1 Self-Directing, Independent Study Aids
10.2 Multi-Media Adapted for Self-Directed Use
10.3 Preparation and Use of Tape-Lessons
10.4 Individualizing Textbook Resources
10.5 Using Published, Individually-Paced, Multi-Level Resources

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NOTE:

The nature of this cluster is such that the competencies to be met in each module may be met through the learning areas and activities in which the intern(s) are already involved, i.e.:

a) On-site Teaching-Learning Experiences with Children
b) Meeting the competencies of other clusters such as:

- Creation and Organization of Classroom Environment
- Integrated Curriculum
- Skill Development: Language Arts
- Skill Development: Math
  and perhaps aspects of these clusters also
- Classroom Interaction and Control
- Diagnosis

****

Cluster 10: Preparing and Using Materials and Resources for Individualizing Learning

Module 10.1 Self-Directing, Independent Study Aids

Objective:

Given appropriate information, instruction, and/or experience, you will be able to create and use with elementary school children original independent study aids according to these specifications:

1) The aids will be self-directing for use by one or two or more learners.
2) Three or more of the aids will be self-correcting.
3) There will be at least two aids in four different subject areas, i.e., at least three aids.
   a) Reading and/or Language Art Skills or Creative Writing
   b) Social Studies
   c) Math and/or Science
   d) Your choice
4) A varied format will be used for at least half of the study aids.

Prerequisite: None

Pre-assessment:

1) Demonstrate that you have created and used with one or more students, original study aids according to the specifications stated in the objective above.

Learning Activities:

1) Observation and/or participation in a classroom where independent study aids (self-directing activities) are used.
2) Attend Class
3) Preview independent-study aids produced commercially (catalogs in Teacher Corps office).
4) Preview independent-study aids made by teachers and/or aides. (Refer to SFUSD List of Innovative Classrooms.)
5) Preview and use: Workshop in English: E7027: Language Arts Games and Activities produced by: Maryann Goodrich and Kenneth Schneider for the S.F. Unified School District.
6) Attend Workshop or Class by Mary Collins, Specialist in creation of multi-level independent learning activities through Sonoma and SFSC Extens.
7) Participate in Workshop-Demonstration of the Cluster Development Team: Creation and Organization of Classroom Environment. (Cf. Staff for time, date, and place.)
8) Student Option.

Evaluation:

1) Creation and submission of eight independent study aids (self-directing activities) according to the criteria and specifications of the objective.
   - Each aid will be self-directing for use by one or two or more learners.
   - At least three of the aids will be self-correcting.
   - Four different subject areas will be covered by two aids each. The areas are:

     Reading and/or language arts skills, or
     Creative Writing, Math and/or Science,
     Social Studies and an elective area.
   - A varied format will be used with at least half of the independent study aids created.
2) Use of three or more independent study aids with group or class of pupils.

Criteria of Acceptance:

Okay by Team Leader and/or other Staff, preferably on site.

Cluster 10: Preparing and Using Materials and Resources for Individualizing Learning

Module 10.2 Multi-Media Adapted for Self-Directed Use

Objective:

Given appropriate information, instruction, and/or experience, you will be able to adapt selected published multi-media material for use in self-directed, student learning centers as herein specified:

1) Rewrite or tape a script as appropriate for elementary students of a particular grade level, for use with a film strip in a self-directed learning center. (Frame-change notations to be included.)
2) Rewrite an explanation in taped or study-sheet format for a single-concept film loop lesson or equivalent media..
3) Prepare worksheets designed to reinforce ideas presented through the particular multi-media presentation used.

Prerequisite: None

Pre-assessment:

Demonstrate ability to do each of the following (or that you have done each):

1) Use of rewritten taped script with filmstrip. The taping and rewording or explaining of the script should have been done by you.
2) Use of single-concept film loop or equivalent media with written or taped simplified explanations. The rewriting and clarifying should be done by you.
3) Use of worksheets and follow-up sheets to reinforce learning through the multi-media presentation.

Learning Activities:

1) Read: Mary Collins' articles: a)Teacher Corps office, "How to Make a Tape." b) Listening Centers in Classroom.
2) Observe and participate in class where learning centers with multi-media are in use.
3) Attend Class
4) Visit and utilize: Instructional Materials Center: 1440 Harrison, S.F. (first floor).
5) Visit and utilize: Creative Environment Center: 1440 Harrison, S.F. (third floor).
6) Student Option

Evaluation:

1) Present an appropriate (for a given grade) written or taped script that you have prepared for use with film-strip in self-directed learning center.

2) Rewrite an explanation at an appropriate level, in tape or study-sheet format, for use with single-concept film loop or equivalent media lesson.
3) Prepare a worksheet or follow-up sheet designed to reinforce learning through multi-media used in the lessons.

Criteria of Acceptance:

Use with learner on site. Okay by Team Leader and/or other Staff.

Cluster 10: Preparing and Using Materials and Resources for Individualizing Learning

Module 10.2 Preparation and Use of Tape Lessons

Objective:

Given appropriate information, instruction, and/or experience, you will be able to create at least four original tape lessons which will:

1) be 5-15 minutes on each tape
2) be for different purposes, i.e.,
    a) reading or language art skills
    b) math reinforcement drill,
    c) social studies concepts
    d) literature appreciation
    e) science concepts
    f) following directions
3) meet specifically stated objectives for each tape lesson
4) have worksheet where indicated.

Prerequisite:

1) Competency check in A.V. Lab at San Francisco State

Pre-assessment:

1) Creation and submission to on-site Team Leader and/or Staff person of four tape lessons for the grade-level of your choice, meeting the criteria stated in the objective.

Learning Activities:

1) Review: Mary Collins' articles: cf. Module 10.2.
2) Listen to teacher-made tapes with varied purposes. (Cf.: Instructor's Tape Resource File, for Math, Language Arts and Multi-Ethnic tapes.)
3) Visit classroom where tape lessons are being used.
4) Attend Class.
5) Student Options

Evaluation:

1) Creation and submission of four original tape lessons which will meet the criteria of the objective:

    Each tape will be 5-15 minutes in length
    Each tape lesson will be for a different purpose i.e.,
        a) reading or language art skills
        b) math reinforcement drill
        c) following directions
        d) literature appreciation.

Each tape lesson will meet the objectives stated for the lesson.
Each tape lesson will include worksheets and tape where indicated..

2) Use of one or more tapes with children.

Criteria of Acceptance:

Okay by Team Leader and/or other Staff person.

Cluster 10: Preparing and Using Materials and Resources for Individualizing Learning

Module 10.4 Individualizing Textbook Resources

Objective:

Given appropriate information, and/or instruction, you will be able to adapt parts of the standard State adopted textbooks, and teacher's manuals into self-directing, self-correcting, independent study activities.

You will be able to use with students at least two lessons prepared in a self-checking, self-correcting format of independent learning activities, using State adopted texts as resources in two or more of these areas:

Reading
Spelling
Language Skills
Math
Social Studies
Science

Prerequisite:

Understanding the use of Teacher's manuals accompanying the State adopted texts as indicated in the objective.

Pre-assessment:

Demonstrate the ability to teach one or more pupils how to use textbook resources independently, in self-directed, self-correcting lessons.

Learning Activities:

1) Study a teacher's manual for a State textbook in your selected areas of emphasis and note suggested independent activities.
2) Discuss with a Master or Cooperating teacher, how teacher's manuals may be used in the classroom in a self-directed way.
3) Observe a lesson using the basic State textbook and manuals in self-directed, independent lessons.
4) Attend class or special session with instructor on how to use textbook for independent activities and study plans.

Evaluation:

1) Preparation,through adaptation, of at least two assignments for pupils from the State adopted textbooks or manuals as specified in the objective. The assignments must be in the self-directed, self-correcting, format of independent learning activities.
2) Demonstrating, with one or more students, at least two independent, self-correcting, self-directing learning activities.

Criteria of Acceptance:

Okay by Team Leader and/or other Staff, preferable on site,

Cluster 10: Preparing and Using Materials and Resources for Individualizing Learning

Module 10.5 Using Published, Individually Paced, Multi-Level Resources

Objective:

Given appropriate information, instruction, and/or experience, you will be able to use published programed and independent study materials with individual learners, and/or teams, and/or the entire class.

Prerequisite: None

Pre-assessment:

Demonstrate previous use of one or more published programed materials with one or more learners.

Learning Activities:

1) Visit classroom where programed and independent study materials are being used.
2) Visit presentation by: SRA, Sullivan, Encyclopedia Brittanica, Self Development and other publishers of Individually-Paced, Multi-Level materials
3) Attend Class
4) Use SRA or other programed materials with learners.
5) Student Option

Evaluation:

Demonstrate use of one or more published programed materials with group of learners, individual, or class.

Criteria of Acceptance:

Use on-site with learners. Okay by Team Leader and/or other Staff person.

MULTI-LEVEL INDIVIDUALIZING LEARNING OPPORTUNITIES IN AN ENRICHED CLASSROOM ENVIRONMENT

Cluster 9: The Learner: Individualizing Learning

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Cluster 11: Organizing and Scheduling Individualized Learning

11.1 Recording and Reporting Continuous Progress
11.2 Organizing and Scheduling Options
11.3 Collecting and Organizing Resources

Multi-Level Individualizing Learning Opportunities
in an Enriched Classroom Environment

Cluster 11

Organizing and Scheduling Individualized Learning

11.1 Recording and Reporting Continuous Progress
11.2 Organizing and Scheduling Options
11.3 Collecting and Organizing Resources

****

NOTE:

The nature of this cluster is such that the competencies to be met in each module may be met through the learning areas and activities in which the intern(s) are already involved, i.e.:

a) On-site Teaching-Learning Experiences with children

b) Meeting the competencies of other clusters such as:

- Creation and Organization of Classroom Environment
- Integrated Curriculum
- Skill Development: Language Arts
- Skill Development: Math
  and perhaps aspects of these clusters also
- Classroom Interaction and Control
- Diagnosis

****

Cluster 11: Organizing and Scheduling Individualized Learning

Module 11.1 Recording and Reporting Continuous Progress

Objective:

Given appropriate information, instruction, and/or experience, you will be able to maintain a record-keeping system which shows continuous progress of an individual pupil in such a way that the progress is evident to both the learner and the teacher.

Prerequisite: None

Pre-assessment:

1) Present in writing, to an on-site staff person, an actual record-keeping (or alternative equivalent) system which shows the learner's progress daily of for a short selected period of time.
2) Describe in written or oral form how the learner uses this system to participate in evaluation of his progress.

Learning Activities:

1) Attend Class
2) Interview teachers using record-keeping systems designed for showing continual progress for and to the learner.
3) Design and use an individualized record-keeping or alternative equivalent system for a group or class of learners which involves:

   a) learner-participation in evaluating progress, and
   b) planning next steps toward meeting goals or objectives.
4) Student Option

Evaluation:

1) Maintain an individualized, continuous, record-keeping or alternative equivalent system operational with a group or class of learners so that the learner and teacher know areas of successful acheivement, rate of progress, and quality of work.
2) Show that the system has been used with a student, group of students, or a class.

Criteria of Acceptance:

Use on site with learners. Okay by Team Leader and/or other Staff.

Cluster 11: Organizing and Scheduling Individualized Learning

Module 11.2 Organizing and Scheduling Options

Objective:

Given appropriate information, instruction, and/or experience, you will be able to organize and schedule, two or more groups or the class, for a selected period of time, to facilitate specifically-stated goals and objectives of individualized learning as follows:

1) Some pupils will be studying specified tasks.
2) Some pupils may be working with a team or group on specified or elective activities.
3) Some pupils will be free to choose self-directed, independent learning activities.
4) Some pupils will be in consultation as individuals or by groups with the teacher
5) Some pupils may have other agreed upon options.

Prerequisite: Modules 9.1-9.3 and 10.1-10.5

Pre-assessment:

1) Demonstration to on-site staff of the ability to organize and schedule groups of learners or a class to facilitate individualized learning in accordance with specifications of the objective.

Learning Activities:

1) Review from Multi-Level Learning Resource Materials; prepared for Clusters 9-11: Shiel, Howes, Wolfson, Poirier, Durell (cf.: Module 9.1).
2) Read Periodicals: cf.: IDEA Bibliography excerpts in Multi-Level Resource Materials.
3) Visit classrooms where individualized learning programs are in operation.
4) View and hear slides and tapes: Brittain Acres School, Highlands School (cf.: Module 9.1).
5) Attend Class
6) Participate in or study components of the: California Teacher Development Project Workshop in Individualized Instruction, Dr. Carmichael, Fremont (657-2350) or Dr. Warren Kallenbach, San Jose State College.
7) Student Option.

Evaluation:

1) Demonstrate with two or more groups of learners, or the entire class, a working schedule that permits the learner options as specified in the objective.

Criteria of Acceptance:

On-site demonstration with children. Okay by Team Leader and/or other Staff.

Cluster 11: Organizing and Scheduling Individualized Learning

Module 11.3 Collecting and Organizing Resources

Objective:

Given appropriate information, instruction, and/or experience, you will be able to collect and organize materials and resources in a part of a classroom, or a complete classroom, to aid and facilitate individualized learning in these specific ways:

1) Materials and resources for regular classroom and/or contract learning will be readily available and clearly marked for use by the learners.
2) Learners will be instructed and checked out on how to properly locate, use and return all materials.
3) Multi-media Learning Centers will be set up and maintained for individual, team and class use.
4) Learners will be trained and checked out in use of Audio-Visual equipment.
5) Learners will be instructed and checked out on their ability to use and interpret the continuous progress record-keeping system.
6) Self-directed, independent-study activities will be arranged for easy, orderly access.

Prerequisite: Modules 11.1, 11.2

Pre-assessment:

1) Demonstrate to on-site Staff the ability to collect and organize materials and resources in ways specified by the objective.
2) Demonstrate to on-site Staff the ability to train learners to use the multi-media centers.

Learning Activities:

1) Same as 11.2
2) Same as 11.2
3) Visit classrooms where multi-media, multi-level centers and activities are in use.
4) Same as 11.2
5) Attend Class
6) Interview teachers with diverse learning environments in their classrooms.
7) Student Option

Evaluation:

1) Show in a classroom materials and resources gathered and used to meet the specified criteria in the objective.
2) Have learners prepared to demonstrate their competencies in using the materials and audio-visual equipment used in the diverse learning experience centers.

Criteria of Acceptance: Okay by Team Leader and/or Instructor.

*MULTI-LEVEL LEARNING RESOURCE MATERIALS

*These Multi-Level Learning Resource Materials have been gathered from many sources yet they are only samplings. The materials are only semi-organized as you will want to pick and choose pertinent parts as you have the interest or need for them.

Contents:

Some Classroom Patterns — Pages

1. Shiel, Barbara, The Self Directed Classroom 1-17
2. Durrell, Donald D., Patterns in Pupil-Team Learning . . . 18-31
3. Poirier, Gerard, An Adventure in Heuristics 32-37

Individualized Education

- Pupil-Paced Learning Contracts 38-51
- Small-Group Scheduling and Interest Centers. 52-56
    - Team Learning: Rotation Schedules
    - Learning Interest Centers
- Classroom Management Ideas 57-65
- The Duluth Models 66-81
    - Student Learning Contracts

Articles:

Esbenson, Student Learning Contracts 82-84
Ogston, Individualized Instruction: Changing the Role of the Teacher. 85-90

Language Arts Supplement 91-135

1. Individualized Reading Ideas and Charts
2. Diagnostic Samples Tests
    - Informal Reading Tests, Durr
    - Informal Tests for Reading Disabilities
    - Reading Skill Inventory
    - Group Diagnostic Test A
3. Diagnostic Spelling Test
4. Vocabulary Lists

Multi-Level Learning Resource Materials

Contents: continued

Math Supplement 136-143

I. Power Pops:

Number Fact Progress Charts and Tests

II. Tangrams 144-155

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SUPPLEMENT:

I. Planning for Independent Learning 156-164

Pupil Planning Progress Record, Daily Log, Assignment Log, Self-Evaluation, Individual Conferences, Daily Planning, Teacher Planning and Critiquing Levels

II. Characteristics of an Individualized Learning Program, ... 165-168
SFUSD: Frank Montoro

Appendix C
Competency-Based Course Outline & Sample Cluster from the Deaprtment of Design & Industry at San Francisco State College

COURSE OUTLINE

D.A.I. 150.06 Section 1	Industry in Elementary Education
D.A.I. 190.01 Section 1	Interdisciplinary Technology Workshop

instructors

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sponsored by and in conjunction with

Dr. George Champion, Director
The Center for Technological Education

* * *

Department of Design & Industry

San Francisco State College
Spring Semester
1971

Course Description

150.06 Industry in Elementary Education

Identification and development of resource materials in industrial methods and processes for elementary teachers. Laboratory.

190.01 Interdisciplinary Technology Workshop

Development of plans and materials applicable to interdisciplinary technology programs; assessment of resources. For selected teachers and administrators utilizing or establishing such programs in the public schools.

Course Objectives

1. To work closely with faculty and graduate students in the Department of Design & Industry, and the Department of Education (San Francisco State College), along with San Francisco Unified School District personnel in the development of intradisciplinary and interdisciplinary instructional units and programs to be utilized by these educators in their classrooms and schools for improving student learning potential.
2. To involve large numbers of college students, Teacher Corps personnel, and elementary school teachers in programs of interdisciplinary learning activities with elementary school and preschool age children.
3. To provide persons in the area of elementary school education with the opportunities to integrate diverse knowledges concerning the functions of industry and occupations and their related skills in the areas of: power and transportation, photography and metals arts.

Outline of Course Structure

Weekly Breakdown (based upon 14-week semester)

1st week -- Introduction to industrial arts in elementary education: theory, history, philosophy, and potential.

2nd week -- Evaluation of established elementary school curriculum objectives. The utilization of industrial arts in an interdisciplinary, supplementary teaching-learning approach to meet those objectives. Identification of elementary school industrial programs across the nation-illustrations of past limited experiences.

3rd-14th week-Exploration in the industrial arts with an emphasis on knowledge, skills, resources and techniques which are directly applicable towards enriching and fulfilling established elementary school curriculum objectives and the development of teaching aids for use by teachers in their elementary school classrooms.

Course Content

1. Introduction to Course Content

The following eight industrial arts areas of exploration--metals, drawing, electricity, photography, woods, power and transportation, plastics, and graphic arts--have been broken down into five general categories--Area - Course Objectives - Student Objectives - Content - Suggested Activities.

Area defines both the broad subject of exploration, i.e. woods, metals, plastics, etc., and further delineates the general topics to be covered in that subject.

Course Objectives defines the purpose of studying each particular topic.

Student Objectives defines the specific learning activities the student will explore to meet the course objectives.

Content defines operations, skills, materials, knowledge, processes and products related to the topic to be studied.

Suggested Activities defines learning activities which may be used as a means for studying the content and reaching stated objectives.

2. Specific Areas of Exploration

Area	Course Objectives	Student Objectives	Content	Suggested Activities
1. Woods A. Simple hand gools	1. To develop basic understanding of the use of simple woodworking tools (see content). 2. To develop correct safety attitudes. 3. To develop the concept of mass production and interchangeability of parts through the reproduction of student conceived ideas.	1. To develop and construct three (3) interdisciplinary learning activities in the area of woods which may be used at the appropriate grade level. 2. To identify educational objective(s) and method(s) of classroom procedure and implementation.	1. Hammering 2. Sawing 3. Drilling 4. Measuring 5. Filing 6. Sanding 7. Planing 8. Clamping 9. Carving	1. Mathematics (clock, abacus, geometric, shapes, place values box, chessboard and chess players, computer console, rulers and yardsticks, etc.) 2. Science and botany (weather vanes, anemometer, balance beams, color wheels, sundial, etc.) 3. Art and graphics (picture frames, looms, mosaic boards, linoleum blocks, marionettes, etc.) 4. Social Studies (log cabins, model cities, sluice boxes, musical instruments, models related to power and transportation (i.e., airplanes, cars, helicopters, etc.) 5. Health, foods and recreation (cutting boards, shower clogs, pool table, stilts, cuisinaire rods, etc.) 6. Language Arts (cameras, television sets, radios, etc.)
B. Study of various types of wood	1. To develop the basic awareness of the various types of wood, their characteristics and applications.		1. Redwood 2. Pine 3. Fir 4. Basswood 5. Mahogany 6. Plywood 7. Veneer	1. **Devolopment of wood samples.**

Area	Course Objectives	Student Objectives	Content	Suggested Activities
C. Study of various wood fasteners	1. To develop understandings of the various types of fasteners and their applications.		1. Nails 2. Screws 3. Adhesives 4. Dowels 5. Staples	1. Vocabulary of terms (penny, casing, flat-head, spiral, ring grooved, etc.) 2. Application of various fasteners in activities mentioned under Area A.
D. Simple construction techniques and materials	1. To develop basic understandings of the simple construction materials.		Materials: 1. Balsa wood 2. Cardboard 3. Paper	1. Origami 2. Modular construction with cardboard for use in reconstructed classroom environment. 3. Model Construction 4. Create collage of products & bi-products of materials above.
E. Study of industry associating occupational and ecological problems.	1. To develop an appreciation of the woods -- or lumbering industry-- its importance & effect on our society.		1. Conservation 2. Logging operations 3. Milling operations 4. Transport 5. Wood products	1. Making paper 2. Field trips 3. Dissection of log to explain milling operations 4. Counting annular rings 5. Model watershed experiments
II. Drawing & Sketchings A. Isometric drawing and sketching	1. To develop basic understanding of sketching techniques. 2. To develop an appreciation for and an understanding of how multi-dimensional sketching may aid a students perception.	1. To develop a consciousness of visual perception in students by creating a series of drawings, paintings and sketching activities utilizing a combination of available classroom illustration media which reflects course objective A-2.	1. Isometric lines, circles, ellipses, rectangles, and squares. 2. Use of graph paper 3. Shading 4. Sketching applications	1. Exercise in sketching a. geometric shapes (i.e. squares, parallelograms, triangles b. product construction (i.e. houses) c. geographic areas (i.e. landscape, still life or object)

Area	Course Objectives	Student Objectives	Content	Suggested Activities
	3. To develop a sense of proportion. 4. To experiment with sketching media--tools and materials.	2. To develop two (2) innovative classroom activities utilizing orthographic projection as it is commonly applied in everyday life.	5. Pencils, crayons, poster paints, felt pens, charcoal and pastels 6. Techniques of dimensioning	
B. Ortho-projection	1. To develop an understanding and appreciation of the role and application of orthographic projection in our technological society		1. Meaning of scales 2. Refer to IIA-1,2,3,4,5&6 in content	1. Introduction to maps, map symbols, and scales 2. Sketch plans for activities to be constructed in other areas. 3. Illustration of both a one-dimensional multi-dimensional sketches 4. Construction of three dimensional models from single sheet layouts.
C. Drawing and sketching in industry	1. To develop an appreciation for the technical drawing industry and its significance in our society.		1. Functions of the drawing occupation in industry	1. Field trips 2. Discussion, design and development of a tangible object through manipulative processes.
III. Graphic Arts A. Overview of the graphic arts industry	1. To develop an understanding of the basic processes and techniques used in the area of graphic arts. 2. To explore the impact of the graphic arts on modern society.	1. To develop interdisciplinary learning activities utilizing silk scarves, wood block printing, and creative applications for pressure sensitive materials.	1. Survey of equipment used in the area (letterpress, linotype, lithograph, offset, etc.)	1. Field trips 2. Films 3. Literature 4. Catalogues 5. Development of teaching aid materials and information

Area	Course Objectives	Student Objectives	Content	Suggested Activities
B. Linoleum block and wood block printing	1. To develop basic skills and understanding of linoleum block and wood block printing techniques and applications.		1. Types and application of materials(i.e.) linoleum, rubber tile, etc.) 2. Types of inks, paints, reproduction materials, and solvents. 3. Construction of and the types of materials in wood block printing.	1. Introduction to decimals 2. Construction and comparison of both printing mediums. 3. Design, construction and reproduction of a creative wood or linoleum block
C. Silk Screen techniques and applications	1. To develop basic skills and understanding of silkscreen techniques and applications. 2. To develop a basic understanding of layout, paste-up and visual communication.		1. Silkscreen printing techniques -negative and positive prints -black and white prints -color prints 2. Inks and paints 3. Types of screens used 4. Study of silk worms	1. Construction of silkscreen blocks 2. Design & reproduction of: -programs -charts -cards -covers -posters -paintings 3. Printing on: -textiles -glass -plastic -metal -paper -wood
D. Ditto machine and mimeograph machine operations	1. To develop basic understanding of two duplicating processes commonly found in elementary schools.		1. Dito machine and stencil developments	1. Development of multi-color programs, information sheets, brochures, etc., using the ditto machine. 2. Development by teachers of creative classroom teaching aids--information sheets, assignment sheets, examinations, etc.

Area	Course Objectives	Student Objectives	Content	Suggested Activities
	2. To explore other reproduction processes. 3. To compare and contrast mimeograph and silkscreening processes.			
E. Pressure sensitive materials	1. To introduce the many forms, techniques and applications of the pressure sensitive printing materials.		1. Types (letters, numerals, arrows, graphs, shading, color sheets, coils, etc.)	1. Introduction of pressure sensitive materials to students for use in developing alphabet charts, name tags, number lines, letter and identification charts.
IV. Electricity A. Sources of power	1. To develop a basic understanding of available sources of power. 2. To develop an understanding of the basic concepts and theories of static electricity alternating and direct current.	1. Select three (3) of the five (5) learning activities listed below: a. Development of electrical identification board for interdisciplinary teaching-learning situation. b. Development of simple electro-magnet(s). c. Assemble one (1) set of walkie-talkies. d. Fabricate and construction of simple electric motors	1. Wet cells 2. Dry cells 3. Generator 4. Alternator 5. Thermoelectric 6. Hydro-electric 7. Solar cells 8. Lynden 9. Nuclear power 10. Transformer 11. Van De Graph	1. Dissection of wet & dry cells and identification of materials. 2. Introduction to chemical reactions. 3. Field trips 4. Films 5. Construction of model power generating plants
B. Simple circuit theory	1. To develop a working relationship in the area of the D.C. electricity.		1. Electrical circuit theory--non-conductors and conductors, resistors, transistors, & diodes.	1. Construction of door-bell circuit, light circuit, and parallel and series circuits.

Area	Course Objectives	Student Objectives	Content	Suggested Activities
			2. Circuit construction, utilizing: -wire -switches -lamps -buzzers -bells -filaments & fuses -solder	2. Techniques of soldering 3. Electric games 4. Electro-magnets 5. Simple motors 6. Walkie-talkies
C. Effects of electricity on modern society and man.	1. To develop an appreciation towards man's only non-polluting source of power, electricity		1. History of technological change as influenced by the discovery of electricity--communications, transportations and other standards of living, etc.	1. Exploring the social, economic and political effects that electricity & electronics has made toward changing the world around us.
V. Synthetics A. Simple processes techniques of forming plastics	1. To develop knowledge about and skills related to forming, shaping, molding, casting, and forming plastic materials.	1. Select four (4) of the five (5) processes listed under A-1. 2. One (1) process selected from the five (5) listed above will be an original learning activity to be used in the classroom.	1. Thermo-forming 2. Blowmolding 3. Injection molding 4. Fiberglassing 5. Casting 6. Dipping 7. Foams 8. Solvent cementing	1. Dip-coating 2. Casting 3. Pouring molds 4. Foaming 5. Fuse plastic painting 6. Foam art 7. Designing molds

Area	Course Objectives	Student Objectives	Content	Suggested Activities
B. Impact of plastics on society	1. Identification of various types of plastic materials. 2. Develop an understanding of the increasing rise of synthetic materials in modern society		1. Clothes 2. Furniture 3. Toys 4. Construction materials 5. Household goods	1. Flame testing 2. Developing list of synthetic products found in the home and classroom
VI. Power & Transportation				
A. Generation of power	1. To develop a basic understanding of the history pertaining to the sources of mechanical power.	1. To construct a grounds effect machine, rocketship, and model car.	1. Internal combustion engines 2. External combustion engines 3. Wind 4. Water	1. Survey of gasoline, diesel, stem, jet & rocket engines. 2. Development of windmills, waterwheels & simple machines
B. Vehicles of transportation	1. To develop an awareness of various means of motorized transportation. 2. To provide the basic knowledge of the construction and function of each vehicle.		1. Automobiles 2. Boats 3. Locomotives 4. Airplanes 5. Trolleys 6. Cable cars 7. Ground effects machines 8. Ionocraft 9. Helicopters 10. Rapit transit	1. Exploration of model rockets (i.e. Apollo 13, aerophotography, etc.) 2. Constructing models depicting modes of transportation. 3. Field trips (automobile plant, diagnostic center, car barn, B.A.R.T., etc.)
C. Effects of power & transportation on modern society	1. To develop an understanding of environmental, social & cultural changes brought about by the advent of improved modes of transportation.		1. Improved communications 2. Intermixing of cultures 3. Import-exports 4. Concept of shrinking world	1. Mapping ancient and modern day traveling times between various countries. 2. Examination & tally of advantages brought about by improved power and transportation systems.

Area	Course Objectives	Student Objectives	Content	Suggested Activities
VII. Photography				
A. Darkroom processes & techniques	1. Introduce students to the science of photography. 2. To provide for skill development & a basic understanding of darkroom procedures, equipment & materials. 3. To provide a basic understanding of negative and print development.	1. To complete each of the activities listed below: a. shoot B&W film b. develop film c. make enlargements 2. To complete one (1) of the three (3) activities listed below: a. develop a complete set of slides b. construct a pin-hole camera c. develop a working knowledge of the video tape recorder. 3. Select one (1) of the three (3) activities listed above to be developed as an original learning activity to be used in the classroom.	1. Negative development 2. Print development 3. Enlarging 4. Safety 5. Special effects 6. Exposures 7. Chemicals 8. Resources 9. Slides	1. Development of negatives and prints 2. Photograms 3. Enlarging 4. Photomicrographs 5. Microfilm 6. Slide mounting 7. Contact printing 8. Proofing 9. Dry mounting
B. Camera Obscura	1. To provide a basic understanding of how cameras operate.		1. Lens 2. Shutter 3. Image 4. Bellows 5. Film 6. Tri-pod 7. Box 8. Resources	1. Construction of pin-hole cameras 2. Visual aide 3. Walk-in camera
C. Motion pictures	1. To develop a basic understanding of 8mm film and video tape recorder techniques and applications		1. Movie cameras 2. Script development 3. Editing 4. Resources	1. Animation 2. Documentary

Area	Course Objectives	Student Objectives	Content	Suggested Activities
VIII. A. Bench metal	1. To develop an understanding of basic hand tools in the area of metal arts. 2. To develop an understanding of the following types of materials: -copper -zinc -lead -aluminum -steel -brass -tin	1. Select one (1) of the three (3) activities listed below to be developed and constructed as an original learning activity in the classroom a. can sculpture b. copper enameling c. wire sculpture	1. Soldering 2. Low-temperature welding (natural gas welding) 3. Filing 4. Drilling 5. Ball pen hammer 6. Hacksaw	1. Wire & tube sculpture 2. Sheetmetal sculpture 3. Canned sculpture 4. Discussion of how materials of metals are made.
B. Copper enameling	1. To provide a basic understanding of the techniques in enameling metals.		1. Copper 2. Enamels 3. Lacquer 4. Kiln 5. Adhesives 6. Annealing 7. Scraffito 8. Stencils 9. Toning	1. Exploration of enameling on metals 2. Construction motifs 3. Jewelry 4. Belt buckles 5. Medallions
C. Casting	1. To develop a basic understanding of low-temperature metal casting.		1. Wax 2. Lead 3. Sand 4. Molds 5. Torch 6. Woods-metal	1. Constructing open face and enclosed molds--pouring molten metal into mold and finishing.
D. Overview of the metal trades	1. To develop an understanding of environmental, social, economic & cultural effects of the area of metal in relation to our modern day society.		1. Blacksmithing 2. Iron worker 3. Sheetmetal worker 4. Boilermaker 5. Shipyards 6. Airlines	1. Tour facilities (i.e. United Air Lines Maintenance Base) 2. Development of teaching aids and visuals.

Area	Course Objectives	Student Objectives	Content	Suggested Activities
			7. Tool & Die maker 8. Machinist 9. Automotive	

SECTION IX: SAMPLE MODULES FROM THE DEPARTMENT OF DESIGN AND INDUSTRY AT SAN FRANCISCO STATE COLLEGE

While project "spin-offs" of various kinds were found in each of the programs, that which was perhaps the most unusual was a series of module clusters developed by the Department of Design and Industry at San Francisco State College. The notions which are incorporated in the modules were due to the influence of the work being accomplished by the Teacher Corps program there. This series of module clusters is clear evidence of the program's influence. The example presented here is Module Cluster 2: Wood Technics.

Module 2-1

Objective: Given appropriate instruction and/or information you should be able to verbally: (1) identify, by accepted name, ten hand tools recommended for use in the elementary schools, and (2) state a major application for each tool described.

Prerequisites: Module Cluster 1.

Preassessment: See below.

Learning Activities:

1. Read chapter 5 in Scobey.
2. Attend class.
3. Read materials distributed in class.
4. Interview with instructors, assistants, or team leader.
5. Review suggested references.

Evaluation: Develop a list of hand tools and complementary equipment necessary for educationally significant industrial arts learning activities on the grade level--preschool through six--of your own choosing.

Criterion of Acceptance: Evidence of comprehension through approval of instructor, assistant, or team leader.

Recycle:

1. Review suggested references.

2. Interview with instructor, assistant, or team leader.

3. Student option.

Feedback:

1. Written and verbal inquires, points of information, constructive comments, directed to instructor, assistant, or team leader.

2. Citation of additional resources and references.

3. Information concerning past programs of similar content.

Preassessment for Module 2-1: Identify 10 of the 15 hand tools which have been organized by number on the laboratory workbench. Place the proper name of each hand tool next to its appropriate number and list at least one application for each.

1. a.
   b.

2. a.
   b.

3. a.
   b.

4. a.
   b.

5. a.
   b.

6. a.
   b.

7. a.
   b.

8. a.
   b.

9. a.
   b.

10. a.
    b.

11. a.
    b.

12. a.
    b.

13. a.
    b.

14. a.
    b.

15. a.
    b.

Module 2-2

Objective: Given appropriate instruction and/or information you should be able to demonstrate a basic proficiency and understanding of the (1) use of basic woodworking tools, (2) concepts of mass production and the interchangeability of parts, and (3) correct safety attitudes, through active participation in the classroom production of silkscreen frames.

Prerequisites: Module 2-1.

Preassessment: See below.

Learning Activities:

1. Attend class.
2. Read materials distributed in class.
3. Practice and develop hand tool skills and knowledge in the following areas--hammering, sawing, drilling, measuring, filing, sanding, planing, clamping, and carving--through the curriculum unit development and construction of two or more learning activities which may be applied to your particular grade level of interest.
4. Consultation with instructor, assistant or team leader.
5. Review suggested references.

Evaluation: Complete stated objectives.

Criterion of Acceptance: Evidence of proficiency and knowledge through completion of stated objectives as approved by instructor, assistant, or team leader.

Recycle:

1. Review suggested references.
2. Individual work experiences with instructor, assistant, or team leader.
3. Student option.

Feedback:

1. Written and verbal inquires, points of information, and constructive comments, directed to instructor, assistant, or team leader.
2. Citation of additional resources and references.
3. Additions and deletions of suggested list of learning activities.

Preassessment for Module 2-2: Demonstrate your level of basic woodworking tool proficiency and knowledge by performing the following operations on an assigned learning activity.

1. Hammering.
2. Sawing.
3. Drilling.
4. Measuring.
5. Filing.
6. Sanding.
7. Planing.
8. Clamping.
9. Carving.

Module 2-3

Objective: Given appropriate instruction and/or information you should be able to demonstrate your knowledge of various types of wood, their characteristics and applications through stating (either orally or in writing) the (1) common names, (2) directly observable physical characteristics, and (3) modern-day applications of each of seven or more wood samples you have developed as a teaching aid.

Prerequisites: Module Cluster 1.

Preassessment: See below.

Learning Activities:

1. Attend class.

2. Read materials distributed in class.

3. Develop your own set of wood samples for use as a teaching aid in your elementary school classroom.

4. Consultation with instructor, assistant or team leader.

5. Dissect a log as a teaching aid to explain milling operations.

6. Review suggested references.

Evaluation: Complete stated objectives.

Criterion of Acceptance: Approval of instructor, assistant, or team leader.

Recycle:

1. Review of literature.

2. Interview with instructor, assistant, team leader.

3. Student option.

Feedback:

1. Written and verbal inquires, points of information, constructive comments, directed to instructor, assistant, or team leader.

2. Citation of additional resources and references.

Preassessment for Module 2-3: Identify the following wood types by placing the appropriate identification number of the wood samples, on display in the classroom, next to the correct name. List common uses and physical characteristics of each sample in the space provided.

____Redwood
    1. Uses:
    2. Characteristics:

____Pine
    1. Uses:
    2. Characteristics:

____Fir
    1. Uses:
    2. Characteristics:

____Basswood
    1. Uses:
    2. Characteristics:

____Mahogany
    1. Uses:
    2. Characteristics:

____Plywood
    1. Uses:
    2. Characteristics:

____Veneer
    1. Uses:
    2. Characteristics:

Module 2-4

Objective: Given appropriate instruction and/or information you should be able to demonstrate a basic understanding of the various types of fasteners and their applications by employing them in the construction of silkscreen frames as outlined in module 2-2.

Prerequisites: Modules 2-1 and 2-2.

Preassessment: See below.

Learning Activities;

1. Attend Class.
2. Participate in completing objectives, outlined in module 2-2, utilizing nails, glue, screws, dowels and staples.
3. Read materials distributed in class.
4. Consult with instructor, assistant, or team leader.
5. Review suggested references.

Evaluation: Complete stated objective.

Criterion of Acceptance: Evaluation and approval of instructor, assistant, or team leader.

Recycle:

1. Review literature.
2. Individual work experiences.
3. Student option.

Feedback:

1. Written and verbal inquires, points of information, constructive comments, directed to instructor, assistant, or team leader.
2. Citation of additional resources and references.

Preassessment for Module 2-4:

1. List five wood fasteners.

   a.
   b.
   c.
   d.
   e.

2. Identify the following terms by naming the wood fastener to which they relate.

   ________a. Penny.
   ________b. Flat head
   ________c. Casing.
   ________d. Plastic resin.
   ________e. Ring shank.
   ________f. Box.
   ________g. Furring.
   ________h. Finish.

Module 2-5

Objective: Given appropriate instruction and/or information you should be able to demonstrate a basic understanding of the use of simple construction materials by designing a curriculum unit and constructing a supporting learning activity incorporating balsawood, cardboard, paper, or chipboard.

Prerequisites: Module 2-1, 2-2, and 2-4

Preassessment: See below

Learning Activities:

1. Attend class.
2. Experiment with balsa wood, cardboard, paper and chipboard construction techniques.
3. Consult with instructor, assistant, or team leader.
4. Read materials distributed in class.
5. Review suggested references.

Evaluation: Complete stated objectives.

Criterion of Acceptance: Approval of instructor, assistant, or team leader.

Recycle:

1. Review literature.
2. Individual work experiences.
3. Student option.

Feedback:

1. Written and verbal inquires, points of information, constructive comments, directed to instructor, assistant, or team leader.
2. Citation of additional resources and references.

Preassessment for Module 2-5:

1. Define the following terms:
    a. Modular construction:
    b. Model construction:

    c. Origami:

2. List at least two learning activity applications for the following materials:

    a. Balsa wood:

    b. Cardboard:

    c. Paper:

    d. Chipboard:

Module 2-6

Objective: Given appropriate instruction and/or information you should be able to develop an appreciation of the woods--or lumbering industry--its importance and effect on our society.

Prerequisites: Module 2-3.

Preassessment: See below.

Learning Activities:

1. Attend class.
2. Develop instructional units from those of your own design.
3. Consult with instructor, assistant, or team leader.
4. Read materials distributed in class.
5. Review suggested references.

Evaluation: Develop at least one comprehensive teaching aid from the list of suggested activities or from one of your own design.

Criterion of Acceptance: Approval of instructor, assistant, or team leader.

Recycle:

1. Review literature.
2. Individual work experiences.
3. Consult with instructor, assistant, or team leader.
4. Student option.

Feedback:

1. Written and verbal inquires, points of information, and constructive comments, directed to instructor, assistant, or team leader.
2. Citation of additional resources and references.
3. Additions and deletions to suggest list of activities.

Preassessment for Module 2-6

1. List twenty (20) items you come into contact with almost everyday which are made from wood or wood by-products.

   a.
   b.
   c.
   d.
   e.
   f.
   g.
   h.
   i.
   j.
   k.
   l.
   m.
   n.
   o.
   p.
   q.
   r.
   s.
   t.

2. Trace a section of wood from forest to neighborhood lumberyard desrcribing the processing it undergoes from living tree to finished lumber.
3. List the steps involved in paper production.

APPENDIX D

INTERN EVALUATION FORM

INTERN EVALUATION

INTERN: ______________________

PERIOD
COVERED: ______________________

RELATIONSHIP TO STUDENTS (rapport, ability to communicate, etc.)

Strengths

Weaknesses

USE OF APPROPRIATE METHODS AND MATERIALS

Strengths

Weaknesses

RELATIONSHIP TO PEERS ON-SITE (rapport, ability to see other viewpoints, etc.)

Strengths

Weaknesses

KNOWLEDGE OF APPROPRIATE SUBJECT MATTER (content taught in a given grade)

Strengths

Weaknesses

CLASSROOM MANAGEMENT (record-keeping, etc.)

Strengths

Weaknesses

WORK HABITS (Punctuality, attendance, etc.)

Strengths

Weaknesses

COMMUNITY INVOLVEMENT (above and beyond classroom instruction)

Strenghts

Weaknesses

PARENTAL CONTACT (rapport, pupil follow-through when necessary, etc.)

Strengths

Weaknesses

COMPLETION OF COURSEWORK (college classes, progress in developing competencies, etc.)

Strengths

Weaknesses

ATTEMPTS TO IMPROVE (effort made to grow in subject matter knowledge, instructional techniques, self-awareness, understanding of pupils, etc.)

Strengths

Weaknesses

Assessment

__________Strongly encourage continuance in program
__________Encourage continuance in program
__________Question continuance in program (suggest reexamination of professional goals)
__________Discourage continuance in program
__________Strongly discourage continuance in program

Evaluator Comments

Intern Comments

Evaluator Signature:____________________________Position__________________________Date__________

Intern Signature:____________________________

END